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HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB.

INSTITUTED SEPTEMBER 23, 1831.

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM."

1873—1875.



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PROCEEDINGS

OF THE

BERWICKSHIRE NATURALISTS' CLUB.

*Address delivered to the Berwickshire Naturalists' Club, at
Berwick, September 25th, 1873. By CHARLES STUART,
M.D., Chirnside, President.*

GENTLEMEN,

ACCORDING to established usage, I have now the privilege of reading a summary of the proceedings of our Club for the past year.

The anniversary meeting was held at Berwick, on Thursday, 26th September, 1872. The weather was bright and fine, after a furious storm of wind and rain, which was very disastrous to the crops. On the day previous the river Whitadder was in higher flood than since 1846, and caused great damage by overflowing the fields and carrying down the corn yet exposed. On the day of meeting, the sea was still breaking in huge rollers, very grand to look at from the shore. There were present:—The Rev. F. R. Simpson, President; Dr. F. Douglas and Mr. Hardy, Secretaries, and Mr. Middlemas, Treasurer; Revs. J. G. Rowe, Thos. Rogers, W. Procter, jun., J. C. Brown, LL.D., P. G. McDouall, Wm. Darnell, W. L. J. Cooley, J. Irwin; Dr. Fluker (Sheriff of Berwick), Dr. C. Stuart; Messrs. F. J. W. Collingwood, Jas.

Purvis, George Young, John Clay, Robert Douglas, W. Cunningham, G. L. Paulin, Matthew Young, Thos. Patrick, and W. Weatherhead; and as visitors, Mr. Dykes and Mr. A. Simpson.

The business transactions were taken up after breakfast, the accounts audited, and the funds of the Club reported to be in a satisfactory state. The annual subscription was fixed at 6s. for 1872-3. The new members elected were:—Mr. Thomas Arkle, Highlaws, Morpeth; Mr. Adam Deas, Dunse; Mr. J. T. S. Doughty, Ayton; Captain Carr-Ellison, Hedgeley; Mr. W. T. Hindmarsh, Alnwick; Rev. R. Home, Swinton; Rev. R. Park, Bamburgh; Major J. Paton, Hundalee Cottage, Jedburgh; Mr. H. A. Paynter, Alnwick; Mr. E. A. Storer, Alnwick and County Bank; Captain Thompson, Walworth Hall, Darlington. Mrs Barwell Carter, daughter of the late Dr. Johnston, was chosen as an extraordinary member; Mr. Andrew Brotherston, Kelso, and Mr. John Ferguson, Allanton, were placed on the list of corresponding members. It was resolved that fifty extra copies of the Club's Proceedings should be printed, to exchange for the transactions of other Natural History or Archæological Associations; and that Mr. Hardy be authorised to open a friendly correspondence with such societies as are willing to co-operate, the custody of such publications as are received to remain with him for the meantime, and to be acknowledged in the Club's Proceedings. The following are the appointed places of meeting for 1873:—

Chatton	- - - - -	Thursday, May 15th.
Howick	- - - - -	„ June 26th.
Bass Rock	- - - - -	„ July 31st.
Chirnside	- - - - -	„ Aug. 28th.
Berwick	- - - - -	„ Sept. 25th.

The meeting at the Bass was afterwards changed to the 30th, as the date fixed would have interfered with the meeting of another society, in which several members were interested.

Dr. Douglas brought examples of *Veronica peregrina*,

gathered by Mr. A. Brotherston, which had spread as a weed over the garden at Newton-Don. Dr. Stuart had a collection of the Whitadder plants; but there was not leisure on this occasion to identify them as species. He also brought part of a British cranium, with a rude flint knife or scraper, which was discovered in the same cist, and more fully described in a separate notice in the Proceedings.

Thereafter the Club adjourned to the residence of Mrs Barwell Carter, formerly that of her distinguished father, and inspected many memorials of that eminent naturalist, as well as several drawings of Mrs Johnston, which for fidelity to nature and exquisite delicacy in manipulation are unrivalled as illustrations of her husband's writings. Under the guidance of the Vicar of Berwick, the Rev. J. G. Rowe, the Church was visited, the stained glass windows inspected, and the old inscriptions examined. In the vestry are preserved the colours of the Berwick Volunteer Regiment of 1806. A walk was taken to the coast at Greenses, along the escarpment of the shale and limestone. The limestone is mostly compact, and is characterized by fine encrinal stems, *Producti*, &c. But towards the northern edge it becomes cellular, the hollows being filled with crystallized carbonate of lime. The party proceeded no farther than a slip in the stratification, by which the sandstone has been brought down several feet, and the ends of the shale strata, in slipping down, have been twisted backwards. The sandstone contained certain concretionary nodules of iron. Farther along towards Berwick, fragments of *Stigmaria* in this sandstone are converted into iron. There are nodules of iron-pyrites in the shale. The surface of the limestone is cracked into massive squares like pavements. The strata slope towards the sea; and off the Greenses are at intervals shattered away circularly from each other, by the irregular action of the waves, so that they appear to be like a series of rims round a centre, like a target. The same process may be seen on a sloping road, over sandstone strata, where the

tear and wear of the traffic is not uniform. There is a constant waste of the coast at the Magdalen Fields, which supplies a good section of the Boulder clay. Many of the stones which once formed its constituents are scattered on the beach ; there being several rolled blocks of greenstone (one very large), and a variety of different sorts of porphyry (one of them particularly pretty). Some contain scales of mica, and approach to syenite ; and there is a brown variety of imperfectly crystalline structure, which resembles the trap-porphyry of St. Abb's Head. Most of them are probably from Lamberton Hill, in the vicinity. Mr. Stevenson writes:—"I have found pebbles of the Cockburnlaw granite on the shore at Berwick. The only greenstone in the district is a vein at Blackies' Heugh, between Eyemouth and Burnmouth." Several of these blocks have been utilized in paving the town of Berwick ; but the greater portion of the stones employed for this purpose are shipped from the coast near Budle. The sea-weed was being carted off from near the pier, in an oblong vehicle much more commodious than the ordinary farm cart. The sea-weed is the property of the Corporation, and the right to lead it away is sold.

The Museum has received some interesting additions since the Club's last visit. A Bonito was noticed as not being recorded by the Club. It is hoped that this and several other omissions will yet be supplied.

Twenty-three assembled at dinner in the King's Arms Hotel. The President brought under the notice of the Club a communication from Mr. Geo. P. Hughes, of Middleton Hall, entitled, "A Resumé of Discussions at the Brighton meeting of the British Association, Aug. 14th to 22nd, 1872." Mr. Hughes represented the president of the club on that occasion, and it was regretted that there was not time to take up his report at present. The President then delivered an able address ; and Dr. Charles Stuart was elected President for 1873.

The first meeting of the Club took place at Chatton, on Thursday, 15th May, 1873. There were present:—The President, Dr. Stuart; Mr. James Hardy, Secretary; Mr. R. Middlemas, Treasurer; Drs. J. Marshall, J. Robson Scott, Robert Wilson; Revs. W. Greenwell, J. S. Green, P. G. McDouall; Messrs. J. C. Langlands, W. Dickson (Wellfield), Thomas Tate, Edward Allen, C. H. Cadogan, J. Heatley, R. G. Bolam; Captain J. F. McPherson; and as visitors:—Messrs. G. T. Atkinson (Wylam Hall), Chas. Green, Anthony Marshall; Revs. Henry Bell and J. Hudson.

After breakfast, Mr. Bolam handed round a knife. The handle was of brass, and on it was the figure of a man playing the bag-pipes, the rest being occupied by a scroll ornament in relief—date about 1500. It had been found in a drain near Glanton. The Rev. Canon Greenwell brought for inspection an ancient gold ring of Elswitha, or Aethelwith, sister of King Alfred, with her name inscribed. She was married to Burhred, King of the Mercians, in 854, in the royal vill called Chippenham, with profuse liberality of every kind; and died A.D. 888, on the way to Rome, and her body lies at Pavia.*

The company was then conducted by the Vicar through the Church; their attention being chiefly directed to the memorial windows for Algernon, Duke of Northumberland, and two windows of recent date to the memory of the Rev. M. Burrell, which were executed by Messrs Hardman & Co., of Birmingham, at a cost of £105, the amount being subscribed in the parish. The inscription which runs along both windows is, "Dedicated by the parishioners to the memory of the Rev. Matthew Burrell, twenty-five years Vicar of Chatton, who died 29th March, 1869." The subjects are

* "Simeon of Durham," and "Anglo-Saxon Chronicle."—"The circumstances attending the finding of this relic are such as may lead us to associate it with a journey known to have been undertaken by that princess. This jewel was found by a countryman in, we believe, Warwickshire, and, notwithstanding its weight and appearance—signs sufficient, one would think, to shew that it is of gold—it was for a considerable time attached as an ornament to a dog's collar."—*Athenæum*, October 11th, 1873.

taken from the Gospels, and represent incidents in the life of our Saviour. A fragment of bony structure in the rockery at the Vicarage attracted some attention, doubts being raised as to its being bone at all. I submitted portions to the Professor of Anatomy in Edinburgh University, who stated that, although he could not define the animal, the substance was indubitably bone. It was dug out of a drain, and may have been the remains of an extinct animal.

The walk was now to Chillingham; and although mist obscured the higher points of Cheviot, the weather from being wet in the earlier part of the day, improved, and was agreeable to the pedestrian. A short visit was paid to the gardens; and the collections of ferns and exotics were examined. *Primula Japonica*, the new introduction from Japan, was in flower; and I may mention in passing, that Mr. Fortune, who has sent it and many other varieties from China and the east, is a native of Berwickshire, and was educated at the parish school of Edrom. Everything in the hot-houses seemed in excellent health and well cared for. Some of the members inspected the old oak in the pasture. It appears to have been originally two trees, which stood in proximity and coalesced; a portion of the trunk had rotted, but this had recovered itself by being overlaid with a new coating of wood, sent downwards from the branches. It is a monstrous dwarf, consisting almost entirely of stem, which is very rugged. There is another famous tree at the lodge where the entrance is to the Castle. It is an English elm, and is called the "Summer Tree." The Rev. J. Hudson showed the party through the small ancient Church, which contains a fine monument in memory of one of the ancestors of the present Lord Tankerville. The family vault is beneath the monument. As there is a full account of this in Mr. Dickson's anniversary address, in Vol. iv. of Hist. of Club, pp. 29 and 30, it is unnecessary to go again into particulars. The park-keeper now conducted the party into the celebrated deer-park, to get a sight of the wild cattle. The Park at

this season has not assumed its summer greenery, and has a wild aspect ; there being many swamps fringed by alders, and the grass being of a gray, coarse description. In the open space there are fine thickets of woodland, from which the red roe and fallow deer are viewing with jealousy the approach of our party. As the wild cattle—perhaps in a herd of a hundred—are lying quietly on a slope directly in front of us, and as the suspicious deer are moving towards the herd and might alarm the cattle, we are entreated to keep quiet and steal quietly along a patch of newly-planted larches, which shelters a shed where they are fed in, in the winter season, with hay. We were fortunate to get within about three hundred yards, and with the aid of our glasses got a fine view of the herd : the calves lying in front of their mothers, and the old bulls looking ugly enough customers to meet at too close quarters. In this larch plantation there is a paddock where any weakly calf may be placed, so as to get a little more attention from the keeper. There was a bull calf, ten months old, who afforded the company a capital pantomime of the actions of the old animals. He was lying at the far side of the enclosure when we approached, but immediately roused himself, and gathering himself together, made an advance with his head down and pawing the ground, sending the soil over his back ; again lowering his head and advancing in a menacing attitude, and coming nearer and nearer as if to meet a coming foe, causing no small amusement to the visitors. If he had been asked to perform he could hardly have acted his part better. The cows rear calves at all seasons, and should they be incautiously disturbed, are apt, by their hurried movements, to injure their young. The colour of the adult animals is invariably white, with a black muzzle, and sometimes a black tip to the tail ; spotted calves are sometimes produced, but are immediately converted into veal. The ears are red inside, and for one-third outside also ; and it is said there is a red streak between the muzzle and the nose. Their

average weight is from 35 to 45 stones of 14 pounds. The bull shot by the Prince of Wales in October last weighed sixty stones, and the horns on that animal seemed small in proportion to the bulk of the animal, from the fact that the horns of both deer and cattle grow smaller as age advances. I omitted to mention that the horns of the cattle are black, with white tips, and pointed upwards. In the winter season the cattle become much tamer, and are fed with hay and turnips in inclement weather. In a storm they betake themselves to Robin Hood's bog, which is the traditional site of the first of the race. The "Yeaxes Wood," which lies below Hepburn Tower, and "My Lord's Wood," are distinctive names applied to particular woodlands. In "Hart Wood," below Rass Castle, is the heronry. Some of the birds we saw; and they begin to breed early at that place. From "Charley's Knoll," where there is a sandstone quarry, a path led down into a dell, with some fine alders on its side less than usually decayed at top, and much resembling elms. Passing on, we came by a periwinkle covered bank and woodland path to the Castle. On our way the Tree-pipet and Wood-warbler were piping their spring songs. The Redstart had been previously seen at the cottages facing the approach. Near the entrance is a boulder composed of reddish felspar and quartz, with minute mica scales. It is a Cheviot porphyry of the granitic variety. Chillingham is in the line of drifted blocks from Cheviot.

The Castle was designed by Inigo Jones, and consists of four ancient Border towers, connected by more modern buildings; the whole, however, harmonises admirably, and presents an effective appearance of combined strength and grace. It is situated in a beautiful English landscape. To the north and west the Cheviots rear their imposing forms; while on the the south-east Rass Castle shows its craggy front, broken into numerous woody and rocky defiles, forming the picturesque park of Chillingham, famous all over the world for its wild cattle. We were courteously shown the

principal rooms of the Castle. The dining-room contains three celebrated pictures by Landseer. The Wild Cattle, and a Group of Red Deer, are excellent examples of the master hand of this prince of animal painters. At the other end of the dining-room hangs a very fine picture by the same artist, depicting an incident in the life of the present Lord ; who, while a youth, was attacked in the park by a wild bull—which was shot by one of the keepers. Landseer admired this picture so much, it is said, that he had it in his studio for twenty-five years. It was only when the other pictures described were sent to Chillingham, that this celebrated one could be got. A fine portrait of the present Lord Tankerville, by Sir Francis Grant, and presented by his Lordship's tenantry, also graces this noble apartment ; while horns of the wild cattle, and furniture in the antique style, harmonise well with the building and surroundings. The drawing-room is also adorned with many fine pictures ; and a screen hung with miniatures and enamels excited particular attention. Everything here showed a refined taste ; the furniture being—like that in the dining-room—in good keeping with the style of the architecture of the Castle, and of the most beautiful description.

The flower-garden was waiting for its bedding plants, and in consequence, vacant. However, a *Wistaria Sinensis*, here trained on a wall, showed to what a size, in favourable situations, it would attain. The Black Spleenwort (*Asplenium trichomanes*) grew everywhere on the walls, and proved the antiquity of the place.

Mr. Atkinson, of Wylam Hall, kindly presented the Club with an instrument, his own invention, for measuring the height of growing trees—which I myself have tested and found very useful. The thanks of the Club were awarded for his attention.

After dinner, a copy of "The History of the Club," from the commencement, which belonged to one of its founders, was purchased by the Club: hitherto the Club was not

possessed of its own records. Mr. Hardy showed a variety of flint implements, obtained since those last figured and described in the last Part of the Proceedings, and particularly a curved knife and a fine flint battle-axe, both from Penmanshiel, Berwickshire; and the Rev. Mr. Greenwell concluded by an account of the various purposes to which flint was rendered subservient among the savage races of Britain. The Rev. Evan Rutter, M.A., Oxon, was proposed as a member.

The second meeting of this Club was held at Hawick, on the 26th June, in connection with the Hawick Archæological Society. There were present:—The President, Dr. Stuart; Dr. F. Douglas, Secretary; Dr. C. Douglas; Revs. M. H. Graham, A. Davidson, J.S. Green (Wooler), W. Lamb; Captain McPherson; Messrs. J. B. Boyd, Scott Dudgeon, Stevenson, C. Watson, Wood, Currie, W. Dickson, W. B. Boyd, Borthwick and J. C. Langlands. The members of the Hawick Archæological Society present were—Dr. Brydone, President; Messrs Vernon and Watson, Secretaries; Rev. J. R. Dakers; Professor Elliot, of Goldielands; Messrs. Pringle (of Wilton Lodge), John Thomson, Govenlock (Tiendside), C. M. Wilson, R. Michie, John Davidson, R. Murray, R. Black, J. Guthrie, A. S. Lawson, &c., &c.

Unfortunately, the weather was wet; but after breakfast at the Tower Hotel, there were indications of a favourable change. Several distinguished members of the Hawick Archæological Society had prepared papers describing the antiquarian and geological features of Hawick and neighbourhood. These papers were to have been read after breakfast; but as time was limited and a considerable amount of sight-seeing to be done, they very thoughtfully had their papers printed, and distributed to the members of our Club in the room before breakfast—and as may be imagined, this was a great convenience for reference during the excursion. As these papers will appear in the next instalment of our Proceedings, it is unnecessary for me to say more.

We examined, in the first instance, the ancient part of the hostelry in which we were assembled, viz.: the Duchess of Monmouth's room, and the last remaining arch of the old foundation. The museum was inspected, which contains a capital collection of flint implements and other antiquities. The vaulted ground flat of Mr. Laurie's house in Mid-row, showed the last remains of protection from the Border foray in its arched or vaulted roof. The Moat is certainly the most interesting object within the bounds of the burgh; and is capitally described in Dr. Brydone's excellent paper. Mr. R. Michie was most attentive to the members in informing them on the spot of all that is known relative to its probable uses as a place of sepulture, &c.

It was intended that the excursion should have extended to the Southfield tumuli, by Hawick Moor, the Catrail, the Druidical circles at Priesthaugh, and thence by Northhouse to Tiendside, Chapel-hill, and Branhholme; but as it was found that the vehicles could not be got up some of the *stey braes* to be back in time for dinner, it was resolved, reluctantly, to leave the Catrail for another day. We started about noon in two waggonettes for Chapel-hill, under the guidance of Dr. Brydone, Mr. Robert Govenlock, Mr. R. Michie, Mr. Robt. Murray, Mr. J. S. Vernon, and Mr. David Watson, who pointed out all the places of interest in our drive up the Teviot. Foremost amongst these was the old peel of Goldielands. After a bracing walk, we reached the cluster of forts on Chapel-hill. On our way, Dr. F. Douglas picked up the *Botrychium lunaria*, the moonwort fern; which is perhaps not so rare after all, for, from its small size, especially on pasture, it is often overlooked. While examining the remains of the pre-historic Gadenica—which many eminent archæologists consider the Chapel-hill forts to be—the Scotch mist came on again, wetting the grass and making walking far from comfortable. However, we persevered, and got a fine peep of Harden through the mist. The party now drove down the rugged road that

connects the vales of Teviot and Borthwick, and regained the turnpike at New-mill, whence we quickly left for Commonsidge cottage. The Tiendside hill is now bravely breasted. The fort on the summit is especially interesting, owing to the excavations carried out by Mr. Govenlock, revealing a British hut, eight feet square, taking us back to a very remote period of history. We were greatly indebted to Mr. Govenlock's excellent guidance. Although the Cat-rail was in view, time was flying so fast that on returning to the road it was determined to turn our faces towards Hawick. Accordingly, we all started down Teviotside, and halted at Branxholme, and the outside of the building and grounds were inspected. The associations connected with this residence—Sir Walter Scott and "The Lay of the Last Minstrel"—were sufficient to kindle the Border enthusiasm of the party.

"Nine and twenty knights of fame
Hung their shields in Branksome hall ;
Nine and twenty squires of name
Brought them their steeds to bower from stall ;
Nine and twenty yeomen tall
Waited, duteous, on them all ;
They were all knights of mettle true,
Kinsmen to the bold Buccleuch."

The drive homewards was now resumed, *via* Martin's Bridge, to Wilton Lodge, where Mr. Pringle kindly pointed out what was interesting in the landscape, and in the beautiful grounds surrounding his mansion, and the "Wallace thorn" referred to in Mr. Murray's paper. The geological section of the Club visited Goldielands, by invitation of Professor Elliot, and inspected his geological collection.

Dinner was on the table when the party reached the Tower Hotel ; and with sharp appetites, great justice was done to the good things provided. "Success and prosperity to the Hawick Archæological Society," was proposed by Dr. F. Douglas, coupled with "Success and prosperity to the Berwickshire Naturalists' Club."

The following new members were proposed on this occasion :—Rev. Hastings M. Neville, rector of Ford ; Professor A. Freire Marecco, Secretary to the Natural History Society of Northumberland and Durham ; Rev. George Henderson, Ancroft ; and Charles M. Wilson, solicitor, Hawick.

The third meeting of the Club took place at the Bass Rock on July 30th, and was the most numerously attended meeting of the season. Fifty members and their friends were present :—Dr. Stuart, President ; Dr. F. Douglas and Mr. J. Hardy, Secretaries ; Mr. Robt. Middlemas, Treasurer ; Sir Walter Elliot ; Revs. J. S. Green, P. G. McDouall, W. L. J. Cooley, W. J. Meggison, Ambrose Jones, L. J. Stephens ; Captains J. T. McPherson, J. Carr-Ellison ; Messrs. J. C. Langlands, J. Clay, F. Walker, A. R. Borthwick, Ed. Allen, W. Dickson, W. Stevenson, T. Allan, J. P. Turnbull, G. Allen, W. Dickson (Wellfield), J. Scott Dudgeon, R. Douglas, G. P. Hughes, M. Young, J. T. S. Doughty, M. Dand, W. B. Boyd, H. Hunter. As visitors :—Professor Balfour ; Messrs. Fanon, J. Anderson (Scottish Antiquarian Society), J. Sadler (Royal Botanic Gardens), Hunter Blair (Newcastle), James Brown (Wedderburne Castle), John Latham, J. Brown (Glasgow), J. Blackadder, J. Bertram, Llewellyn Jones. Master Carr-Ellison and Master Douglas.

The weather being pleasant and the wind light, the landing on the rock from Canty Bay was accomplished comfortably ; but owing to a number of the members having omitted to send their names, previous to the meeting, to Mr. Hardy, the means of transit to the rock were unfortunately deficient, which caused a number of members to be late for dinner, and get some rain and rough weather in returning from the rock, which the first parties happily escaped. *Sagina procumbens* and *S. apetala* were observed as new to the Bass by Mr. Hardy, and *Peplis portula* in a pool near the summit, and in flower, by Mr. Sadler. At the landing place at Canty Bay plenty of *Scabiosa Columbaria* was observed—by no means a common plant in the district. Dr.

F. Douglas, in a stroll to Tantallon, also picked abundance of this *Scabiosa*. On the way to Canty Bay, I picked the *Ononis arvensis* in quantity, with white flowers. On a previous visit, Mr. Hardy observed the corn-fields to be infested with *Papaver argemone*, *P. rhœas*, and *P. dubium*; and that the gaudy corn flower, *Centaurea cyanus*, now almost extinct in Berwickshire, grew near Drem and again towards Whitekirk. While waiting for the boat at Canty Bay, Mr. Sadler observed many beautiful sea-weeds. In one pool in particular he was much struck with the luxuriance of *Laminaria Saccharina*, *Delesseria sanguinea*, *D. alata*, *Chorda filum*, and *Corallina officinalis*. In this pool there was a splendid specimen of *Actinia*, and several specimens of *Medusæ* and *Berœe* swimming about. At the point where the boats started from, there was abundance of fine specimens of the dark olive green *Himanthalia lorea*, with fronds from one to four feet long, with their curious button-like discs. Some splendid specimens of *Laminaria digitata* were seen, as well as all the common sea-weeds: such as *Fucus nodosus*, *F. serratus*, *F. vesiculosus*, *Ulva latissima*, *Enteromorpha intestinalis*, &c. The two representative phænogamus plants of the Bass are the tree mallow, *Lavatera arborea*, and the sea-beet, *Beta maritima*—which were got; and the *Lychnis dioica*, with very large leaves—was growing in profusion everywhere above the landing-place on the rock.

The Bass is 420 feet above the sea-level and is a mile in circumference, and the water around is considered to be 200 feet deep. It is composed of an augitic greenstone, generally fine and granular, but sometimes so abounding in felspar, as to verge on clinkstone. It exhibits in a very marked manner the tabular structure, as is also the case in the similarly composed Isle of May. On the north side it is most precipitous, and the sea view is particularly impressive. Its superficies is guessed at seven acres. A cavern-like passage penetrates through the rock from N.E. to S.E. The cavern is passable even at full tide, if the sea be calm. The

Bass is inaccessible, save on one flat shelvy point to the S.E. The south and north sides of this point are the only two landing places. The fortalice is situated immediately above, and commands these points. At one time the fort could only be reached by ladders, or a wicket and a chain; but this was improved by a stair in the ramparts. The fort and the dungeons are unroofed and in ruins. Blackadder's Cell is still pointed out, with its three iron-barred windows, to the west. When the Bass became the bastille of Scotland—the state prison for the Covenanters—the chapel was converted into a powder magazine; but the niches for the fonts show it to have been built prior to the Reformation. The Bass was the last place that yielded to the dominion of William III., and held out for several years after the Revolution. In 1706 the government handed it over to Sir Hew Dalrymple, and dismantled the forts and prison.

The following are the principal of the present inhabitants of the Bass. The Solan Goose, or Gannet, measuring 6 feet from tip to tip of the wings; the large Black Gull, about 5 feet; the large Blue Gull, about 4 feet 9 inches; the Kittiwake, about 3 feet 7 inches; the common Marrot or Guillemot, abundant, 2 feet 8 inches; the Puffin, or Tommy Norrie, about 2 feet; the Razor-billed Marrot, about 2 feet 4 inches; the Peregrine Falcon; the large Raven; the Eider Duck and the Cormorant, with a number of small birds. The Solan Goose is the most important, and is a large white bird with a longish neck and strong formidable bill. It is almost peculiar to the Bass and Ailsa Craig; and at the time of our visit was flying in hundreds. The female hatches only one egg; but should the egg be removed, she will lay as many as twelve eggs, but leave her with her first egg and she will lay no more. They come early in February, and linger till October, although most leave the rock when the young are taken, about August. The young are taken by the keeper for their down, and the oil they contain. The flesh is of a fishy flavour, and by no means a morsel, I should suppose,

that would please an epicure. It was a most interesting sight to watch the headlong plunge of the Solans from the top of the rock, as well as their fishing operations and those of the other varieties previously mentioned, whose cries were heard from a distance on the water while fishing in parties, or playing with each other. The cry of the Solans is a species of bark ; and, altogether, the combined cries of the different birds are not so great as represented. The young Solans, covered with their fine down, were most interesting objects ; and, although they could not fly, the noses of more than one member of the Club plainly testified whether or not they could bite. Their nests were composed of *Holcus lanatus* and sea-weed rubbish, and were of a very rudimentary character. The nests had a most pungent odour of urea and fish, with which in warm days the whole atmosphere of the island is saturated. The number of the Solans is at present augmenting. We inspected two fine specimens of the Peregrine Falcon, removed from an eyrie on the rock to the keeper's at Canty Bay. They were noble-looking birds ; and he asked £4 for the pair. To the buildings on the rock the mealy lichen, *Diploicia canescens*, is everywhere attached ; and the prevalence of the *Parmelia parietina* imparts a golden hue to the tops of the towering cliffs, and is seen for a considerable distance out at sea, as well as the fine pink colour from the flowers of the *Lychnis dioica*, above the landing place. *Amara familiaris* and *Cryptophagus affinis* were two insects observed. The latter, which is accounted very rare, was flying about in scores, and showed a marked preference to alight on a black coat.

Four papers were read during the day : 1st. "On the Benedictine Nunnery of North Berwick," by John Stuart, LL.D., F.S.A., Scot. ; 2. Notices of the Ecclesiastical History of East Lothian and the Bass ; and of Saint's Caves, by the same ; 3. Excerpts from the Books of John Earl, and afterwards Duke, of Lauderdale, respecting the prices of Solan Geese from 1674 to 1678, communicated by Mr. Robert

Romanes; 4. Notes on some Bass Plants, by Mr. Jas. Hardy.

Forty-one dined at the Commercial Hotel, North Berwick—the President in the chair. Mr. R. Douglas, Town Clerk of Berwick, officiated as croupier. Professor Balfour, who accompanied the party, was proposed as a member by Sir Walter Elliot, and seconded by the President; and was at once elected, by unanimous consent. Sir Walter Elliot and Mr. Hughes, of Middleton Hall, Northumberland, were appointed representatives of the Club at the British Association.

The fourth meeting of the year was held at Chirnside, on August 28th. There were present:—Dr. C. Stuart, President; Mr. Jas. Hardy, Secretary; Drs. R. Hood, F. S. Cahill, and Matthew James Turnbull; Messrs. D. Milne Home, W. B. Boyd, C. B. P. Bosanquet, F. Russell, W. Stevenson, George Young, C. Watson, W. Crawford, F. Walker; and as visitors:—Captain D. Milne Home, and Messrs. John and Charles Stuart.

After breakfast, some drawings by Mr. Geo. P. Hughes, of the singular-looking oriental insects called “Walking sticks” and “Walking leaves,” were examined and commented on. These insects had been collected by Dr. Hughes, a member of the Club, in the East India Islands. The President produced some interesting plants—*Saxifraga hirculus*, *Sedum villosum*, *Ophioglossum vulgatum*, *Gymnadenia conopsea*, &c., from Langtonlees dean; and *Lythrum Salicaria*, *Convallaria polygonatum*, *Typha latifolia*, *Epipactis latifolia*, &c., from Chirnside parish and the adjoining one of Edrom. Also, specimens of fibrous white Gypsum and red Selenite, from Edington Mill; and a mass of bastard limestone, containing a pocket or drusy cavity of crystallized carbonate of lime.

The weather, from being somewhat doubtful in the morning, now improved; and the party set out for a walk to the rivers Blackadder and Whitadder. In passing, the gate at Nine-wells was entered, and from the top of the wood a most beautiful peep of the house was obtained, and the

finely wooded bank below overhanging the Whitadder. Crossing Allanton Bridge, we walked up the banks of the Blackadder, below Allanbank House. Here, on the south side of the river, we have a good section of the Tuedian strata, including sandstones and fossiliferous shales. The discovery of animal remains in this section is due to Mr. Stevenson. They are, as determined by Mr. Robert Etheridge, jun., of the Ordnance Survey : *Gyracanthus formosus*, Agassiz; *G. tuberculatus*, Ag.; casts of palatal teeth of *Ctenoptychius pectinatus*, Ag.; spine of probably *Ctenacanthus* (?); scale of *Rhizodus*; and crushed cases of Entomostraca. Mr. Witham long ago found plenty of *Coniferae*, &c., in these strata, in a sandstone quarry, in the immediate vicinity, at Allanbank mill, now filled up. "This bed," Mr. Stevenson writes, "is just a little below the dark shales in which the fish, &c., remains (above enumerated) occur, and is the same sandstone as is quarried at Langton, Puttenmill, Kimmerghame, Broomhouse, Eccles, Coldstream, &c. Its geological position is at the bottom of the Lower Carboniferous series. I have found remains of *Gyracanthus*, *Entomostraca*, &c., in it, associated with *Lepidodendra*, *Stigmariæ*, *Calamites*, &c., (but no Ferns) at Langton, Puttenmill, and Broomhouse." Mr. Stevenson goes on to state that "the only place where the rare Crustacean (*Erypterus Scouleri*) is found is Kimmerghame, or rather Mungo's Walls quarry. Only four other cases of its being found were recorded before the Kimmerghame one. These Berwickshire beds are, I think, chiefly of Estuarian origin, and are similar in every respect to strata which are well exposed in Balagan and other glens between Campsie and Dumbarton." On the north side we got a few good plants: *Viola odorata*, *Veronica Buxbaumii*, *Lysimachia nummularia*, *Adoxa moschatellina*, and *Ornithogalum umbellatum*. Large patches of *Mentha sylvestris*, in fine state, were inspected, and *Mentha viridis* was also gathered farther down the river; and *M. piperita* grows in profusion on the banks of the Whitadder.

below Allanton, on the right bank going down. On the left side, we picked an *Echium*, which is very distinct from the *vulgare*; insomuch, that the stamina are much longer than the corolla, and the plant branched in a very curious manner. The late Dr. Johnston evidently alludes to this plant in "Natural History of the Eastern Borders," p 147, quoting Lightfoot, who conjectured that it was *E. Anglicum* of Hudson. Dr. Johnston had obtained it from the Gaitheugh, opposite Old Melrose. We entered the Whitehall Woods at the Steeple-heugh, a precipitous elevation beautifully wooded, which rises a hundred feet from the river bed, where we rested to enjoy the prospect. On entering the woods, *Malva moschata* was in fine flower in the gravel pits, and excellent specimens of its white-flowered varieties were obtained at Hutton Hall mill, about two miles farther down. At the Blue Stone ford, under the planes and thorns, profusion of *Viola odorata*, and farther down on the haugh the same abundance of this plant, is observed. *Plantago media*, in fine flower, was ornamental on the grassy banks everywhere. *Mentha arvensis* is here a common weed in land—a plant not seen on the coast line of the county, Mr. Hardy informs me. Mr. Milne Home pointed out that the Broomdykes haughs—now intersected by the river—which are now enclosed by high banks, appear once to have formed a large lake which had burst its barriers, traces of its ancient margin being still perceptible on the north and south sides. This will be marked in a map of the river district of Berwickshire on which he is at present engaged, and in which he expects to be able to trace out the contour of the country in post-tertiary times, but previous to the present era, by following out the directions taken by boulders and the still uneffaced indications of old coast lines. On the top of the Steeple-heugh, stands a tall, entirely one-sided in its branching Scotch fir, formed and modelled into shape by swirling gusts of wind, which striking here with most violence have made a vacancy in the plantation all round the spot. The tips of

the shoots of an old yew hedge were observed to be withered at the points, specking the trees all over. Mr. Bosanquet remarked that there were similar marks of blasting, disfiguring exotic pines at Rock ; whether owing to atmospheric agency or the work of insects, is not at present known, but is worth inquiring into. Near Blue Stone Ford there is a section of stratified gravel and greywacke stones—mostly in lines ; and coarse sand overtopped by a thick capping of clay. Here two rounded boulders of the granitic porphyry of Cockburnlaw were noticed, with unmistakeable evidences of ancient transport. At Blue Stone ford lay many much rounded boulders, one of them faintly striated, whether structural or by ice action could not be determined, of the basaltic trap of the country, to the west of Greenlaw. These are relics of boulder clay now swept off, but may have followed down an ancient track of the Blackadder. There are no stepping-stones at the Blue Stone ford, but several very slippery ledges of “blue whin,” which in fording are to be avoided, as many a traveller has been sent headlong into the water from incautiously allowing his horse to get on to these treacherous pavements.

At Edington Mains, Mr. Wilson kindly invited the members to luncheon ; and exhibited thereafter many querns picked up on different parts of his farm. There were also a number of boulders obtained in the process of draining, subsoiling, &c., which included several pieces from Cockburnlaw of pseudo-granites and porphyries ; and a particularly well marked black metamorphosed Silurian slate, whose original locality is on the banks of the Whitadder, about and below the Retreat. This indurated slate was hollowed into curious forms, as if the softer portions had long been subjected to tritulating agencies. Here again we find the existing river combining in transporting debris, although the site is more than a hundred feet above the level of the present stream. Many roods of dikes have been built on the farm with boulders alone. Bold, naked scaurs of Tuedian rise on the

eastern side of the stream ; the highest ones being of a blue colour—opposite Edington Mill—in which are veins of red Selenite and fibrous Gypsum. The scaur lower down is still more lofty and precipitous and is of a red colour, and is situated immediately below Hutton Hall mill mill-dam, the colour being owing to a reddish soil having been washed over the face of the cliff. This scaur is seen for miles, and is a conspicuous object from the village of Chirnside. A little farther down the stream, on the Chirnside side, is a most precipitous bank covered with brushwood, and brambles and whins, named the Cripple-nick. On this bank, from its commencement to where it ends, the *Lathyrus sylvestris* is to be found in profusion, its dense patches being in July covered with beautiful flowers ; now, however, we only get it in fruit. A little farther down on the haugh is the station for the White Musk Mallow ; which my second son has also found opposite Whitehall since the meeting of the Club. The *Lathyrus sylvestris* is a very rare plant in Scotland, and this is certainly about the only place where it does grow. On the haugh immediately above this several good plants are to be found, e.g.: *Sium angustifolium*, *Schœnus compressus*, *Potamogeton pusillum*, *Myosotis palustris* and *cæspitosa*, *Anacharis alsinastrium*, and *Scirpus lacustris*. On the red scaur the *Epilobium angustifolium*, the beautiful *Vicia sylvatica* and *Origanum vulgare* occur along with *Tanacetum*, *Artemisia*, and *Pyrethrum Parthenium* ; and on the sandy pasture on the same side immediately above the red scaur, *Convolvulus arvensis*. The *Melilotus major* grew on the same bank with the *Lathyrus sylvestris*, but I have failed to find it this season. The precipices in June and July were clothed with brilliant blue beds of the *Lycopsis*, which were certainly rivals to any blue garden bedders we possess. Mr. Wilson mentioned that at the foot of the bank below his house he had come on a collection of cockle-shells, fish-bones, and pieces of charcoal ; and it is conjectured, this may have been a family feasting place of the ancient Britons, several

of whose tombs have been disturbed at various times on the adjoining lands ; and that the sea-shells may possibly have been carried up from the coast in the canoes of that ancient people, of whom we have so small a knowledge. The ancient castle of Edington stood on the eminence opposite Hutton Hall, where a small burn with large willow trees on its margin joins the Whitadder at the head of Edington mill-dam. The remains of the old mansion-house of Edington were pointed out in the corner of the market garden at Edington ; and in the pasture-field close to the south-west corner of the garden, is an elevated mound, evidently an ancient place of sepulture, and at the edge of which one cist was discovered by Mr. Wilson's father many years ago.

After dinner at the Red Lion Hotel, Chirnside, the President read a few notes on a remarkable shower of pieces of ice which occurred on the 22nd July, doing considerable damage to glass and vegetation ; also, a notice from Mr. Watson, of Dunse, relative to Mr. W. Hall, proprietor of Whitehall, and patron of the parish, who tried to induce the Rev. George Home, then parish minister, to omit to read a government proclamation to his congregation, in 1736, on the promise that he would give him a bond for the amount of his stipend, as long as the minister lived ; but if he did read the proclamation, that he would never again enter his church or churchyard alive or dead. The minister did read the proclamation, and Mr. Hall was as good as his word ; for he lies buried in a tomb built in the plantation outside the churchyard wall, and which, previous to getting Mr. Watson's paper we had very imperfect information about. Captain David Milne Home, of H.M. 2nd Life Guards (Blue), was proposed as a member.

On the night of the great thunderstorm of the 22nd July, an oak tree was struck by the lightning at Whitemire, in the parish of Edrom, about twenty yards from the farm cottages. It blew the top completely off, splitting the trunk to its root into splinters, and denuding it entirely of its bark. The

people at the cottages informed me that when the tree was struck, the noise occasioned by the rending of the trunk made them believe that the houses were coming down about their ears. Several houses were struck at Chirnside, East Blanerne, and Coldstream, during this storm, and sheep and other animals killed. Ash trees are considered to be most liable to be struck with lightning. On the road-side, not a mile from where this tree was struck, two ash trees were in former thunderstorms stripped of their bark; and a plane tree, close to the village, was so seriously injured that it had to be cut down. No one can fail to be struck with the might of the lightning. I saw this tree an hour or so after it had been struck. The bark in large pieces was hurled three hundred yards into a neighbouring field, and the tree rent and fissured in a curious manner. I also saw an elm on another occasion, immediately after the lightning had torn off the bark, which hung in long ribbands from the top of the stem to the base of the trunk. Of course the tree was killed, and had to be cut down.

As work done by a member of the Club, I may mention Mr. James A. H. Murray's learned book, "*On the Dialects of the Southern Counties of Scotland*," which evinces extensive knowledge of the subject of the Border language. Mr. Murray has also edited for "*The Early English Text Society*," "*The Complaynt of Scotlande*," A.D. 1549, a work which Leyden rendered famous by his preliminary Dissertation. Mr. Murray has prefixed a new introduction, incorporating what was worth preserving in Leyden's, but transfusing throughout the results of more recent and exact research. In a letter to Mr. Hardy, Mr. Murray suggests that some of our members might perhaps be induced "to take to the examination of the Northumberland and Durham dialects—which differ so little from that of Teviotdale, that Prince Lucien Bonaparte in his recent '*Hints on the Classification of the English Dialects*,' makes them one with it under the heading of the '*Scotch of England*,' as distinguished from the

true Northern English of Weardale, Westmoreland, and Yorkshire." To point out wherein it agrees with and differs from the Teviotdale Scotch, would be a work for which students of the English language would be grateful, and it would be "fresh fields and pastures new," for the Club.

In conclusion, gentlemen, allow me to thank you all very much for the unexpected honour you conferred on me, in electing me President for the year. With the able assistance I have received from Mr. Hardy, which I gratefully acknowledge, and the kind indulgence I have met with at the hands of the members, I have found the office less onerous than I anticipated. Conscious of many shortcomings, I feel thankful to every member for his co-operation; and I resign the office with pleasant memories of the happy days spent in the society of persons of congenial tastes, in those pursuits which I am sure every one present will agree conduce to an improving companionship, and exercise an elevating influence on us all.

It only now remains for me to propose as my successor in office, Dr. Robson Scott, of Scotch Belford; who, from his scientific tastes, will, I am sure, prove an efficient President of the Berwickshire Naturalists' Club.

Our Visit to Holy Island in May, 1854. By GEORGE JOHNSTON, M.D., LL.D., &c., &c.

MAY 19th. Leaving the mainland, you enter the boundary of Holy Island on crossing the Low, a rivulet without beauty which winds its sinuous way to the sea through a wide waste of sand. There are two miles of this sand to be crossed before you gain the island; and there is nothing on the road to beguile the slow and weary pace at which it is necessarily travelled. The wooden posts that mark the track are covered with a common barnacle (*Balanus elongatus*) as high as the water mark of the tide; and their base, protected by a few stones, affords ground for the growth of *Fucus vesiculosus*, *Ectocarpus littoralis*, and a variety of *Ulva compressa*. At this season there were no other sea-weeds noticed there. The sands were very thickly covered with the casts of the Lugworm, and the surface strewn with valves of the common Cockle (*Cardium edule*). Scarce another object was seen; and the day was beautiful and favourable for observation.

A stroll through the village disclosed very sensibly the nature of the principal occupation of the natives. In every street heaps of the shells of the mussel and limpet are collected before the doors, and mixed with the refuse of the fishing lines, and with the household ashes, &c. They do send forth a most foul and fishy smell, evidently agreeable to the senses of the householders. Men, and more women, were sitting in the sun, at the doors, occupied in baiting the lines for the morrow. The Mussel was the principal bait. The Lugworm was also being used, but in less quantities; and I found there was an impression against it. The women told me that it tendered their fingers and made them sore. One ascribed the effect to the sand in the worm; another seemed to think that it was owing to the same juice as that which colours the hands. Another objection to the use of the Lugworm was, that it soon decayed and spoiled. A number of skates were laid on the tiled roofs of many of the houses, to be dried by the sun. They were not ornamental, and sent forth a pungent smell. When fully dried they become a favourite relish to the fishermen when drinking their ale; and I was told that they were much in demand by the sailors of the Scotch vessels that are driven here for shelter. They are eaten without any preparation, or simply toasted at the fire.

And insensibly I found myself in the Churchyard, where there is much to interest one, in many ways. The yard has the character of the sluggard's garden—no exception to the character in general of the churchyards in our district. I found its botany to consist of the following vulgar plants:—

<i>Urtica dioica.</i>	<i>Malva sylvestris.</i>
<i>Ranunculus bulbosus.</i>	<i>Ranunculus acris.</i>
<i>Plantago lanceolata.</i>	<i>Rumex acetosa.</i>
<i>Bellis perennis.</i>	<i>Chærophyllum sylvestre.</i>
<i>Lotus corniculatus.</i>	<i>Leontodon taraxacum.</i>
<i>Veronica Chamædrys.</i>	<i>Ranunculus ficaria.</i>
<i>Cerastium vulgatum.</i>	<i>Alopecurus pratensis.</i>
<i>Trifolium pratense.</i>	<i>Cheiranthus cheiri.</i>
<i>Senecio vulgaris.</i>	<i>Heracleum sphondylium.</i>
<i>Anthoxanthum odoratum.</i>	<i>Bromus mollis.</i>

Our evening stroll was from the village to the Castle, and to Sheldrake Bay; and it was very enjoyable. The view, in whichever aspect it is taken, is picturesque and striking, changing its features at every few steps onwards, ever charming, ever new; and in the present instance, these were heightened by the fineness of the day and the fitness of the hour. It was scarcely possible to prevent the mind, entranced as it was with the present, casting backwards a long, lingering look, and re-creating the same as it might have been in the olden time. It was easy to people the walk seaward with the prior, and his monks, and his disciples, holding high converse, as they paced the green, of the various fortunes of their island, and of the deeds and virtues of their saints. Looking over the heaving waves, the sense was almost cheated into the belief, sometimes, that the black heads popping up to the surface were those very sea-otters that the monks were in quest of, and which had so often ministered to the necessity of their patron. Thus runs the story:—Now, while the rest of the community were asleep at night, it was the usual habit of Saint Cudberct “to go out alone and spend the greater part of the night in prayer and prolonged vigils; nor did he return home till the hour of common prayer was at hand. One night, one of the brethren of the same monastery seeing him go out in silence, followed him, with the design of discovering where he was going, or what was his object in doing so. Cudberct accordingly went out, and, followed by the spy, proceeded to the sea, on the borders of which the monastery

was placed, on a height, and entering into the depths of the water till the swelling waves reached his arms and neck, he spent the darkness of the wakeful night in praises, which were accompanied with the sound of the waves. And when dawn was drawing near, he came up to land, and concluded his prayer, on the shore, on bended knees. And as he was doing this, there came forth two beasts, vulgarly called otters, from the depth of the sea, which stretched on the sand, began to warm his feet with their breath, and busily to wipe them dry with their hair. As soon as this service was completed, Cudberct gave them his blessing, and dismissed them to their native waters, while he himself returned to the house to recite the canonical hymns with the brethren at the appointed hour.”*

Observed on the beach nine sackfuls of the Periwinkle (*Littorina littorea*), and as many heaped beside them as might make twelve sacks in all. They are sent to London, as well as to other large towns in the south; and it is singular to find that such a delicacy finds, to this day, a ready sale. Not less than a hundred sacks have been sent away this year already. The gatherers receive from 1s. 3d. to 1s. 6d. per bushel, and three bushels fill a sack, so it is evident that to pay the merchant they cannot be sold at less than 10s. per sack. The corn-craik was uttering his call in the corn-fields—the lark was singing in “the lift so high”—a wind-hover was sailing now close over the ground, and now hovering aloft over his victim—two species of gulls, at least, were carefully fishing in the “lake-like” water—and the shore-lark was flitting about, picking up insects disturbed by the advancing tide. And after passing the Castle, we were amused with the gambols of many rabbits, old and young; and a pair of peaseweeps flew about to warn us off their breeding preserves.

There was no attempt made to enumerate the plants that grew alongside our path, but it was impossible not to notice some of them. The *Anthriscus vulgaris* and *Malva rotundifolia* fringed the dyke-sides, meeting us before the village was cleared; *Plantago coronopus* covered the gravelly road

* Works of Beda, by Stevenson, i., p. 560. The editor says that the beasts were “doubtless seals”—a reading in which I cannot concur. Otters frequent our shore; but the remark is depreciatory to the miracle. [The original is “lutræ,” otters; Ridpath (“Bord. Hist.,” p. 27, note) also translates it “sea-calves.” The scene of the miracle was the original monastery at Coldingham (Coludi urbem), situated on St. Abb’s Head.—J. H.]

with its leafy rosettes; and intermingled with it, there was a maritime state of *Sagina procumbens*, with purple flower-stalks, readily enough to be mistaken for *Sagina maritima*. There was here also a pretty dwarf variety of *Geranium molle*, assuming, as most of the plants did, a rosaceous form, and keeping very close to the soil. *Geranium Robertianum* grew plentifully amidst the stones at the point of Sheldrake bay; and its herbage had, in many individuals, much of the character of that of *G. lucidum*, but all were redolent of the hireine smell peculiar to the species. Near the bay, I picked up a shell of *Buccinum undatum*, of large size, with a rich purple aperture, and a *Patella levis* covered with *Lepralia nitida*, in fine condition. Under stones, *Vitrina pellucida* and *Helix rotundata* were found, but very sparingly.

20th. The morning stroll was to the landing place of the boats engaged in the white fishery. The boats, we were told, had not been well fished. The landing place was disgusting with filth, and it was difficult to approach the boats without treading on garbage. There were a few small haddocks, pouts, dabs, and grey gurnards in the bottom of the boats, with mutilated crabs, partanes, and spider crabs (*Hyas araneus*). The last appeared to be common, and some of the specimens were very fine. One had the shell encrusted with *Botryllus Schlosseri*. There was a fine living specimen of *Venus Islandica*, with *Actinia crassicornis* occupying the surface of one valve.

We left this obscene spot willingly, tracing the shore at the base of the fine cliffs to the north-west, the face of them made beautiful with many tufts of the *Silene maritima* and *Helianthemum vulgare* in full flower, and with the *Statice armeria*. *Parmelia parietina* tinted the surface of the rock, as it does all the seaward rocks in the island, in a very pleasing manner. At the foot of the cliff, which is washed with every tide, grew nothing but the commonest sea-weeds. *Fucus canaliculatus* hung like a tasselled fringe round the base, where it could be reached by the tide only when at full; and between it and the lower tide were *Fucus nodosus*, *Fucus vesiculosus*, and *Fucus serratus*—the latter in sparing quantity. *Chorda filum* was common, and *Ectocarpus littoralis* was the parasite of them all. We soon got to the shore opposite St. Cuthbert's Isle, where his beads were sought for, and we gathered a few specimens. On a rubbishy bank here *Convolvulus arvensis* grew in profusion, amidst

many vulgar weeds; and there were several tufts of the common Fennel, which seemed to be as much at home as any of them. There is a deposit of shells in the bank here at a considerable elevation above the present level of the sea—probably not less than twelve feet. The shells are of the commonest kinds. The common mussel (*Mytilis edulis*), in two varieties, composes most part of the deposit; and we find intermingled, *Littorina littorea*, *Patella vulgata*, *Cardium edule*, and a few broken valves of the oyster. In some of the mussels I found small pearly concretions, and on the external surface the basis of *Corallina officinalis*, *Balanus communis*, *Serpula triquetra* and *Membranipora membranacea*.

Another walk led us from the village to the Coves; and it was impossible not to remark the forwardness and excellence of the crops, superior, as it seemed to us, to the corresponding crops on the mainland. The beans and wheat, in especial, were very promising. The ill-conditioned hedges of hawthorn were flowered with May in several places, but the island evidently does not suit the constitution of the thorn. We picked the following plants as we went:—*Myosotis versicolor*, scattered over the links; *Galium verum*, just springing through the sands with which the winter winds had covered it; *Veronica agrestis*; *Potentilla reptans*, not yet in flower; but *Potentilla anserina*, growing alongside, had put forth its blossoms; *Stellaria media*; *Viola flavicornis*, of Smith, a new plant to our district; *Myosotis arvensis*; *Anagallis arvensis*; *Cardamine pratensis*; *Linum catharticum*; *Hydrocotyle vulgaris*, abundant in the bottom of the grassy basins amidst the links; *Sedum acre*, a useful binder of loose sand; *Sherardia arvensis*; *Lycopsis arvensis*; *Peltidea canina*; *Luzula campestris*; and *Carex vulgaris*, of a dwarf size. The herbage of the links, in several places, was composed chiefly of this *Carex*.

Above the Coves, we saw other two sackfuls of the Periwinkles, and a few gatherers occupied in their silent vocation were on the shore. Small flocks of rooks, with some jackdaws, were feeding within tide-mark, and a few curlews flew away disturbed by our visit.

Descending to the front of the Coves, more solicited our notice than can be enumerated. Of the sea-weeds may be mentioned *Ralfsia verrucosa* and *Hildenbranchia rubra*, because they were in perfection; nor have I seen elsewhere on our coast such fine specimens of *Laurencia cæspitosa*.

Dumontia filiformis was abundant; and I noticed *Alaria esculenta*, *Punctaria plantaginea*, *Asperococcus echinatus*, &c. Of the Mollusca none interested us so much as *Eolis papillosa*. Not fewer than eight or ten large specimens were seen, and under almost every flat stone there were wreaths of its milk-white spawn. The locality is certainly the metropolis of this species. In one instance we saw *Purpura lapillus* feeding on this spawn; and we also saw the *Purpura* in the act of depositing its own egg-capsules. The *Chiton cinereus* was very common, varying greatly in colour and in size; and we procured a single specimen of *Chiton fascicularis*. The Annelides we gathered were *Polynoe cirrata*, *Sigalion boa*, *Nereis viridis*, *Phyllodoce viridis*, *Psammathe fusca*, and *Cirratulus medusa*. Of the Zoophytes none equalled the common *Actinia mesembryanthemum* in beauty, and it appeared under many disguises so far as colour, size, and state of expansion were concerned. Fragments of *Alcyonidium hirsutum* were common.

To the south-east of the Coves there is a considerable portion of shore covered with loose rocks and stones that are perforated in a singular manner with the *Saxicava rugosa*, *Venerupis perforans*, and a saxicolous worm. This must have been the work of many bye-gone years, for we could find very few remains of the excavators. And so, well pleased with our excursion, we turned homewards, walking along the ledge of a series of sand-hills blown up by the winter winds, covering a large space with hillocks many feet in height. On former occasions I had found this space a bent-covered warren. The sand was firm enough to support us without yielding, and was perfectly bare of all herbage and all life, save that a few small beetles and flies had ventured upon the desert—one would have imagined to them illimitable.

21st. In the churchyard there is a large and nearly perfect fairy circle. The Church is cold, damp, and musty within; the walls covered with green mould, and "selaters" were crawling on the paved floor. The seats are unfitted for the service, so much so, that neither male nor female can kneel at any part of it. Every seat has a large brass plate on the door, engraved with the name of its proprietor: and the "Border Brewery" has three seats to its share. The conduct of the service suited the Church; there were no responses made, and a very considerable proportion of the

small flock had no books. Enough! In the evening we walked to the Castle and to Sheldrake bay; then turning northward, we tracked the shore until we got a cart-road which brought us back to the village in a sort of parallelogram. The rain that had fallen during the day had enticed forth a numerous host of *Helix aspersa*, so that it was difficult to avoid treading upon them. *Helix hortensis* was also common enough, but not in such great number; and *Limax ater*, the only slug noticed, was not common.

22nd. The morning was gusty, with alternate showers of rain and glimpses of sunshine, so that our intentions of passing the forenoon in the Churchyard and amidst the ruins of the Priory were nearly frustrated. The women, on seeing the coming rain, carried tubs, which they placed under the projecting spouts of the Church to be filled. Every spout had its tub, and there are a good many of them. One of the women, after placing her tub, set herself to gather the leaves of the docken, which are used by them to lay the hooks upon as they are baited. We also saw the leaves of the cabbage, torn into fitting pieces, used for the same purpose. A hasty visit to the boats produced nothing; so home, and refreshed, we started for the Lough, although the wind rendered a close examination of the water impracticable. The coot, in considerable numbers, was swimming and playing in the deeper water; and two kinds of gulls floated amidst them. Tame ducks and geese were feeding in the shallow water, and a blackbird whistled merrily from the planting on the eastern bank. But all this was as nothing to senses which were absorbed with the glorious, spacious bed of buck-bean that lay spread over the north-west end. The beauty of it was far beyond anything of the kind I had seen elsewhere, and could scarcely be rivalled. The dry season had probably been the cause of this surpassing blow. Beyond it, there was a large space covered with the upright variety of *Polygonum amphibium*, which had produced a much less sure footing than the large, entangling roots of the buck-bean. The east end of the Lough was rich with an abundant and extensive crop of *Equisetum limosum*, affording a safe shelter to the birds; and the gravelly shore was carpetted with *Littorella lacustris*. I got five different species of Leeches in the Lough, a sufficient reward for any trouble or weariness our walk had given.

Many of the tombstones in the Churchyard have the

inscriptions on them rendered illegible by the operation of lichens, viz., *Parmelia parietina*, *Parmelia conspersa*, *Lecanora tartarea*, *Lecanora atra*. A marble slab, protected by a sort of temple, intended to commemorate the virtues of a Watson of Goswick, has proved treacherous to its purpose; but from it the letters appear to have been erased by the action of the saline atmosphere around.

There is a stone let into the wall, or dyke, which commemorates the death of Mr. Alexander Nicolson, who, being ten years minister of the Gospel in Holy Island, departed this life the 31st day of August, 1711, and his age 65. The Latin lines beneath may have sung his virtues, or his pedigree, or pointed the moral, but they are untraceable. The death's head and cross bones, on each side of which the lines were engraved, remain in good condition. A stone hard by is sacred to the memory of Launcelot Wilson, who died May 15th, 1822, aged 77 years, and 31 years minister of this parish. I can just remember the old man, who was distinguished for benevolence and kind-heartedness, and who took a lively interest in all that concerned the Island. He was well known, all the country round, as the "Bishop of Holy Island." The most pretentious epitaph in the yard is the following:—

"In memory of Gilbert Selby, a gentleman of unsullied humanity and honour, an invaluable friend to the inhabitants of this Island, and especially so to the poor. He departed this life, on the 11th of January, 1788, aged 79 years. Also of Sirai, his wife, who, sorrowing, survived him 30 years, and died on the 30th of June, aged 86 years.

So this the World's uncertain span,
Nor zeal for GOD, nor love for man,
Gives mortal monuments a date
Beyond the power of time and fate.
But better boon benign the Heaven
To faith and charity has given,
And bids the Christian hopes sublime
Transcend the bounds of fate and time."

In the evening made the acquaintance of a native fisherman—Ralph Allison,—and phrenologists would at once have pronounced that he had a good head. He was, at all events, a stalwart man, but had lost his forearm a few years ago, by an accident in the prosecution of his calling. He had not learned to observe, and great caution was needed in accepting

his natural history as authentic. All that I could receive were the Island names of a few objects, viz:—

The Pout	is their	Sooter, or Johnee-Dories.
The Gurnard	„	The Gurnald.
The Dog Fish	„	Dogs.
Galathea squamifera,		The Gowdie.
Venus Islandica	„	The Clam.

23rd. Catharine began a sketch this morning of the fine Norman door of the Priory, which promised to be very good; and I occupied the forenoon in examining and preserving the acquisitions of yesterday. It was nearly two o'clock before we started for a walk. This began at the entrance to the Island from the mainland, and we pursued the line of shore northwards. Our object was to observe the plants that grow on the narrow stripe of sand between the bents and tide mark. Here it is that *Arenaria peploides* grows properly in beds, and it was partially in flower. *Cakile maritima* was also at home here, and a few plants had blossomed. Any others noticed were clearly stragglers brought down to an unfavourable position by some accident. They were the *Burdock*, the *Rumex crispus*, *Carduus lanceolatus*, *Crispus arvensis*, *Carex arenaria*, *Potentilla anserina*, *Senecio Jacobaea* with its disagreeable odour heightened to intensity, and *Senecio vulgaris* growing vigorously. The shore was strewn with *Zostera marina*, but it was not seen growing. We came in a short time to a sort of creek leading inland, formed by a removal of the links or sands, which had once lain above the present surface, which is a bed of gravel thickly mixed with dead and bleached shells of *Helix aspersa* and *Helix hortensis*, but more especially with *Cardium edule*. With these there were shells of *Tellina solidula*, *Tellina carnea*, *Littorina littorea*, *Purpura lapillus*, *Patella vulgata* and *lavis*, *Helix nemoralis*, and some minute shells whose names could not be accurately ascertained. This creek cuts in upon the narrowest part of the island, and indeed it reaches with little interruption to the opposite side. The lime works are at the south of it. A ditch near them was choked up with *Sium angustifolium* in a dwarf and matted condition. Not far off there was a large bed of *Ononis arvensis*. It thundered a good deal during our walk, and we had been housed but a short time when the rain began to fall heavily.

24th. Visited a fisherman dying of consumption. His name was Thomas Cromarty; and there are many of that surname in the island. They have a tradition that they came a long time ago from the north, and were emigrants from the county of Lord Cromartie. In the year 1765, as well as my informer can remember, there was a storm on the coast, in which the whole body of fishermen residing in Spittal were lost, and many of those in Holy Island. Two of these—master-boatmen—were Cromarties; and ever since the tribe has been burdensome to the parish, and continues so to the present day. Singularly enough, and a proof of their poverty, there is not a single tombstone to one of the name in the Churchyard. The tombstone is a bad evidence of the condition of a family, and assuming it to be a fair one, we shall conclude that the Wilsons and Greys—large clans here—have held, for generations back, a respectable position in their native place. Their memorial stones are commonplace enough, but they are all in good keeping and repair, and the inscriptions are kindly worded. I copied one as an example of their general tenour:—

“Sacred to the memory of George Wilson, son of James and Elizabeth Wilson, who died the 8th of November, 1834, aged 49 years. His niece, Elizabeth Haswell, feeling with much sensibility her irreparable loss, has erected this stone as a token of respect.”

The fishing this morning was very indifferent. One boat, which was said to be as well fished as most of them, had ten stones weight of haddock. The fishermen receive from the tacksman 6d. per stone during the summer season, which commences on Good Friday; and 11d. or 1s. during the winter, which begins soon after St. Ninian's Fair. They receive 10s. a score for cod and ling, and the fish must measure not less than twenty inches; all under this length are sold by weight at about 3d. or 5d. per stone. Lobsters are, during winter, sold for 21s. per score, and during summer for 15s. Crabs bring 2s. per score. Hollibut, here called turbot, sells for 2s. 6d. per stone. The real turbot is rarely taken, and is uniformly called “Turbrat.” The shore crab is called “Dog crab,” and the spiny crab, the “Crow-fish.” The *Hyas araneus* is called “the Tailor,” and it is hated because it bites through the nettings of the creuves with ease—as easily, said my informer, as a pair of scissors used by a tailor. The velvet crab is called “the Sooming-crab.”

To-day our exploratory ramble began at the lime-kiln on the links, where it terminated yesterday, and we resolved to make the circuit of the northern end of the island. It is a barren link everywhere—a confused and intricate succession of sand ledges, hills, and hummocks, amidst which are excavated by the variable winds, deep bowls, creeks, little bays, and comparatively extensive level plateaus. The creeks in general are bare, with the sandy surface thickly strewn with land and marine shells; but of some the surface is covered with small gravel, in which there are few shells. The flats bear a coarse dry herbage, composed of Carices, Crow-toes, &c. In some places they are quite bare, with a sunburnt, clayey surface; and here the first plant which begins to cover up the nakedness of the sour soil is the pretty *Glaux maritima*. It was now coming into flower. The only mammal seen during our walk was the rabbit, and it was not very common. A dun individual was noticed. Of the birds, the lark was soaring and cheering us everywhere, and we felt that Mr. Alexander Pope was wrong in sneeringly asking and answering his own question:—

“Is it for thee the lark ascends and sings?
Joy tunes his voice, joy elevates his wings.”

We saw the wheatear and the common wagtail. The carrion crow was here. The peasewcep and the curlew frequented the grassy levels; and on the sands, following both the egress and the ingress of the tide, were considerable flocks of the ring dottrel, with another species of the same family. Several large gulls were sitting in solemn state, solitary or in pairs, on the wet sands, and were not easily disturbed; and there were a good many of a lesser gull, less silent and meditative.

We crossed the dreary expanse of sand, with a view of examining the nets which are constructed near low water mark, for entrapping salmon and its kind, but the tide had not receded far enough, and we were disappointed. There were six or seven nets set, and opposite each, on a bank of sand, there is a rude erection of stakes and poles fastened down by ropes. The fishermen dry the nets upon these erections, and on the top they lay the spare ropes and lumber connected with their work. The fishery had hitherto been very unproductive.

During our long travel we saw no plant so fine as the

Lotus corniculatus, which forms a very considerable portion of the herbage on the plateaus. The flower buds are brilliantly tinted with red, and the expanded flowers are pure yellow, and make beautiful tufts. In the same spots the daisy grew plentifully; and *Carex arenaria* found scope to grow in its peculiar line manner. *Carex vulgaris* perhaps predominated in the herbage. The dandelion, in a neat form, contributed a share. In the level where they have formerly worked ironstone, and which is the largest we saw, there were several patches of the creeping willow (*Salix fusca*), which was a pleasant discovery to us. The germens are "silky" only in the early stage: when mature they have become quite smooth. Not far off, we found the meadow-sweet sparingly. The dog-violet—not the true *V. flavicornis*,—for this we did not notice to-day—was scattered over the links; and about the northern bounds there was a good deal of hound's tongue and viper's bugloss on their margin, and on the shore a great deal of the *Cakile maritima*.

In all the grassy levels there are small round knolls, which seem to be formed principally by *Cenomyce uncialis* and two species of *Hypnum* (*Hypnum squarrosum* and *Hypnum sericeum*). *Tortula ruralis* is another moss which covers many parts of the links, in yellowish patches, pleasant to the eye. The little yellow clover (*Trifolium minus*) scatters itself in tiny circular tufts pressed close to the ground, and its herbage is often of a dark purplish colour. When not in flower, the plant might be passed over for a dark lichen.

25th. The thunder and showers of the two preceding days have ushered in this with a constant rain, which we do not regret, and in which the vegetable world will rejoice. The sentence is rather poetical! Observe that the elder is much used here for making hedges in the gardens, and even to the small fields or crofts.

A stroll to the boats was very unproductive. A number of terns were flying about the landing place, screaming and picking garbage from the face of the water. There are from seventeen to twenty boats engaged in the white fishery, and most of them engage also in the taking of crabs and lobsters. Three of the boats were employed exclusively in the latter work. A few small boats are used besides in subsidiary work, as *e.g.*, the conveyance of bait-gatherers to the opposite shore, &c. Five small sloops were lying in the offing, also connected with the fishery; so that there is clearly a

considerable trade in it, in which nearly two-thirds of the population are concerned. Looked at some of the plants on the heugh and saw none that were rare excepting *Poa rigida*. Three or four bushes of sloe-thorn grow on the seaward side, and they are kept almost level with the surface nor dare throw out a blossom. The sea breeze forbids the show.

The day clearing up, two hours were spent in the Church, Churchyard, and Priory; and while Catharine sketched I took copies of more tombstones that were interesting. In the chancel is the following:—

“Here lyeth the Bodie of Ann Jones, sometyme wife to Henry Jones, esqvir, which Ann died on the 19th of Febrvarie, 1625.

In obitvm delectissimæ matris Ann Jones.
Si quis forte rogat, civis tenet ossa spvlerom
Ipse tacens docvi marmora dvra loqvi;
Si qværis proavos, generoso sanguine dicta est,
Si vitam, insignis regvla ivstitiæ,
Si qværis mores, mvlier nec amantior æqvi
Nec pietatis erat nec probitatis erat,
Hæc pro te tristis subscripsit carmina natos
Qvæ svnt officii signa svprema svi:
Per me Petrum Jones.”

A neat and simple marble slab in the Church is:—

“Sacred to the memory of Julia, wife of John Himsworth, Esq., of Broomhouse, in the county of Durham, who died on the 25th day of August, 1839, in the 24th year of her age. This monument is erected by her husband in testimony of his esteem and affection.”

As might be anticipated, many of the stones in the Churchyard are erected to commemorate men who have been seafarers, or who have been drowned. I conjecture that the following has some connection with Captain Nemesis Hall,* whose praises at present fill the papers for his gallant deeds in the Baltic, as his former deeds in China gained for him his distinctive soubriquet:—

“In Memory of
John Hall, of Holy Island,
Who died January the 20th, 1808, aged 61 years;

* John Hall was no connexion of Captain Nemesis Hall. He was an officer of Customs, a native and freeman of Berwick-upon-Tweed. (Communicated by Mr. James Grey, a native of Holy Island.)—J.B.C.

Also, of
Sarah, his wife, who died at Whittingham,
March the 24th, 1819, aged 68 years ;

Also, of
Lovell W. Hall, their son,
Captain in the service of the Honble. E. I. C.,
who perished in the Chinese Seas
in the year 1804, aged 30 years ;

Also, of
Alice Hall, their daughter,
Who died November the 15th, 1808, aged 36 years ;

And of
Seven of their children,
Who died in their minority.
This stone was erected by their son George Hall,
Commander R.N."

The Lilburns are an old island family. Their memorial stone will illustrate the chances and dangers of a sea life. It is as follows :—

"In Memory of
Elizabeth, wife of Robt. Lilburn,
Master in the R.N., who died November 28th, 1819,
Aged 68 years ;
Richard, their eldest son, Lieut. in the R.N., who died
in the W. I., and in command of H.M. Cutter,
L'Expedition, 1796, aged 23 years ;
Robt. Roddam, their youngest son, a midshipman on-board
H.M. Ship, the *Heureux*, when that vessel foundered in the
W. I., 1808, aged 19 years ;
And the above Robert Lilburn, who died September
13th, 1822, aged 75 years."

On the back of the stone the inscription is thus continued :—

"James, 2d son of Robt. and Elzh. Lilburn, M. and C.
in the R.N., who was suddenly cut off, 1812, in attempting
to cut out vessels lying in the harbour of Malaga, and in
command of H.M. Sloop, *Goshawk*, in the 36th year of his
age. Thomasin Smith, their eldest daughter, who died Oct.
17th, 1802, aged 24 years. Elizabeth, their youngest
daughter, who died June 15th, 1817, aged 24 years.

Heaven saw, with pity saw, the future grief,
Felt for her worth, and flew to her relief.
Preventive mercy kindly bid her go
To scenes incapable of earthly woe."

The lines, we believe, are not the produce of the island ;

neither are those in the following, although the orthography may be islandic:—

“ Affliction sore long time he bore,
Physicians skill proved vain ;
At length it pleased Almighty GOD
To ease him of his pain.”

I copied the three following because the dead were buried in a far land, where there are none to care for their monuments :

“ Erected in memory of Mungo Easson, from Dundee, aged 23 years. He perished on board the steamer Pegasus when wrecked off Holy Island on her passage from Leith to Hull, on the morning of the 21st July, 1843. His body, which is here interred, was found near the scene of the wreck, and brought on shore by a French fishing boat, after having been three weeks in the water.”

“ Sacred to the memory of James Richard Elliott, of Rochdale, Lancashire, Attorney-at-law, who was lost in the wreck of the Pegasus steamer, on the 20th July, 1843, and interred here on the 19th of the following month, in the 36th year of his age.”

“ Erected by John and George Denham, South Shields, in memory of their Father and Brother, who were drowned at sea, 2d February, 1823, and buried in the churchyard of Lindisfarne, Holy Island: George, their father, aged 60 years, and Thomas, their brother, aged 24 years.”

“ Erected by Ann Edward, in memory of her husband Alexr. Scroggie, master and part owner of the brig Granite, of Aberdeen, who met with a premature death by falling from his vessel while on this coast, in a gale of wind, on the 23rd February, 1822, in the 36th year of his age. His body being afterwards cast on shore, was decently interred in this burying ground.”

From some children playing in the Priory grounds I learned that here the *Silene maritima* is called “Dead man’s grief,” and the *Lotus corniculatus* the “Tommie-tucker.” The *Veronica Chamædrys* is the “Blue-bell” of the island children. The *Buccinum undatum* must be very common on the grounds where crab and lobster are fished. A fisherman was desired to bring a few specimens, and he brought a large bucket filled with them of all sizes. He brought also a spiny crab, which was loaded in a very extraordinary manner on the body and limbs with *Balan*i and *Anomia*æ. In general the animal is infested with these

parasites, but I had not before seen one so completely overgrown with them, and singularly deformed.

Took in the evening our favourite walk to the Castle, and found that the scene around had lost none of its attractions. Saw the life-boat kept here by Lord Crewe's trustees. And the bait-gatherers, so busy at their work on a sort of island formed by the receding tide, and on the bleak shore, form interesting groups, for they seem very happy in their employment. The hoarse laugh-like cry of the large gulls breaks upon the ear with such abrupt harshness, that the imagination is apt to paint the scene around as savage and solitary, as much as the howl of the hyæna brings the desert before us, albeit we are in the narrow bounds of the menagerie. The rosaceous fashion in which all the plants on the roadway grow again attracted our attention, and the rosettes are very neat and regular. They are exhibited in great perfection in *Senebiera coronopus*, in which the white flowers sit in a cluster in the centre of the rosette, and form an eye there contrasted with the green leafy rays. *Plantago coronopus*, *Geranium molle*, *Erodium cicutarium*, *Trifolium minus*, &c., assume the same rosaceous form. We meet with frequently on the island some incongruous mixtures of plants: such as the scurvy-grass growing intermingled with the chickweed, and the sea-campion with the wall-flower.

26th. My walk was to-day without my companion, and I sauntered along a cart-road which led into cultivated fields, and ultimately conducted me to the Lough. One object was to gather such wayside plants and weeds as I had not yet registered. On one part of the road there were abundance of what appeared to be three species of docks; for although not in flower, they were readily distinguishable by their habit, the different tint of green in their foliage, and by the shape and texture of the leaves. The docks were *Rumex obtusifolius*, *R. crispus*, and *R. pratensis*; and what I saw was much in favour of Professor Arnott's opinion, that the latter is a hybrid between the two others. I examined the trees that had been planted about the Lough, and which were all in a sickly and sorry condition. If any could be said to be thriving, it was the plane (*Acer pseudoplatanus*). The plantation consisted besides, of the alder, the elder, the elm, the birch, the broom, the whin, the black poplar, the mountain ash, and the privet. A few years will witness the failure of this not very judicious attempt to cover the bank

with wood. Some shoots from about the root of *Salix viminalis*, had leaves which could not be distinguished from those of *Salix Smithiana*.

Two truant lads were bird-nesting here, and I procured two eggs of the peaseweep, that we might determine for ourselves whether they were equal to their epicurean reputation. We decided at tea, that they were. I also got from these boys the vernacular names of some birds, viz. :—

The Coot	they called	Bell-ducks.
The Water-hen	„	Water-hen.
The Shelldrake	„	Skell duck.
The Curlew	„	Speace.
The Wagtail	„	Wateries.
The Sanderling	„	Sandies.
The Grey Linnet	„	The Lennart.
The Bank Swallow	„	Butterie.
The Swift	„	The Martin.
The Sea Lark	„	The Sea-mouse.
The Terns, or Teerens	„	The Sea-swallow.

And they knew the stane-chacker and the black-cole-head, as island birds ; and the Moonie, a small bird which I could not identify. They were sure that no kind of crow built in the island ; but the jackdaw had its nest about the Coves. The curlew, they asserted, did not breed in the island. One of the boys said that he had killed a quail at the side of the Lough, this spring, with a stone. There are plenty of the common domestic fowl on the island. Ducks are also common, and those in the village are not seductive. A few geese, with their goslings, abide about the Lough ; and at the onstead there were a couple of turkeys. The pigeon is also kept at the farm steading, and we daily met with the flock feeding in their master's fields. Of domestic mammals the islanders have the cow and its kind, the horse for agricultural purposes, and a few asses, that are kept on the dusty herbage that the road-side affords them. They are used by the poor to bring coals from the continent, and for carrying burdens from one part of the island to another. The muggers who were scattered about the croft had brought a couple of these animals with them. Flocks of good sheep graze the old pastures, and the sunny banks about the Castle afford to the lambs a favourite playground. The people have a set of mongrel dogs ; and there are not enough of cats, for we were told that the island abounded in rats and mice.

The "Lively" cutter came into the roadstead to-day, and gave to the scene a little additional animation. She brought a new boat for the coastguardsmen. In the evening we waded across to St. Cuthbert's Isle, where we saw *Statice limonium* in some abundance. *Plantago maritima*, *Glaux maritima*, and *Sonchus arvensis* grew here plentifully; and a large dock, which appeared to be *Rumex crispus*. The front of the black rock was hung with *Ramalina scopulorum*, and stained with *Parmelia aquila*. We met on the island with two officers of the cutter—one made out to be the doctor, and the other conjectured to be the clerk. They were both gentlemen. In returning, we were arrested by the *Laminaria saccharina*, to ascertain the size of some of the specimens which strewed the shore. One frond measured twelve feet in length, and it was not the largest. *Ectocarpus littoralis* had also attained a remarkably large size. A fisherman was digging lug-worms, of which the muddy sand was teeming; and he threw up one or two rag-worms (*Nephtys margaritacea*). During the day a good deal of rain had fallen, but the evening was fair and mild, favourable for the snail race, yet I noticed only two specimens of the common slugs (*Limax agrestis*).

27th. We took the nearest road to the Coves, starting at 10 A.M. On approaching the bank above them, the ring dottrel flies about us alarmed, as if to say we had encroached on her breeding ground. The advancing tide compelled us to limit our researches to the ledges of rock that bound the bay in front of the Coves, and little was found of any novelty. The bottom of the shallow pools in the rocks is covered with a close growth of *Laurencia pinnatifida*, in a dwarf condition, and of a yellowish colour. On the face of one ledge I gathered *Gelidium corneum* in some quantity, and for the first time. I also picked up some specimens of *Cladostephus verticillatus*, not before recorded as a native of our district. There was a good deal of *Ceramium acanthotum*, and other more common species.

Turning homewards, we followed the sinuous shore, and found amusement in watching the dottrels, which were feeding in great numbers on the sand just at the edge of the water. On what they were feeding we could not ascertain, and yet the fare must have been plentiful that furnished food for so many birds. The beacon erected on the links here was visited; and in the water south of it we noticed a

cormorant fishing, and several pairs of eider ducks and drakes. Turning inland, we visited the Lough, alive, as usual, with the coot. Hence home. Saw the cutter get under weigh, and were ourselves glad to get to our haven.

28th. Rained heavily, and we were confined to the house until evening, when we took our favourite walk—for the last time; and it was less beautiful than on any previous occasion, for the light did not accord so well with the scenery, and the state of the atmosphere had not suited the birds, of which very few were abroad. We found that all our little merchant fleet had sailed, with the exception of one sloop. A lugger-rigged boat had arrived—so that there is here a commerce.

29th. Immediately after breakfast, we hastened to the Coves, in the hope that the tide would permit a long search in the bay they look across. We were deceived in this, and were forced to leave at noon. It was as well. Extricating ourselves—no easy task—from the rough shore, we gained the bank, and had scarcely done so when the rain, which had been falling sometime, fell heavier and faster, accompanied with a bright flash of lightning and a loud peal of thunder. This made us hasten home. While Catharine sketched the Coves, I sought out the productions that grew on the flat in front, but found no new Algæ. Two specimens of *Eolis coronata* and one of *Doris bilamellata*, of a darker colour than usual, occurred, and were duly admired—the *Eolis* being amongst the most beautiful of sea animals. I found two or three specimens of the spotted blenny under almost every stone; it is a sluggish fish, and is ever seeking to hide itself. The five-bearded rockling also occurred.

30th. We bid farewell to the island and islanders, who, alas! have fallen on evil days; but the memory of the past does not disturb their present happiness, for, I believe, not one individual on it has any knowledge of what the island has been.

[The ancient Parish Church of Holy Island had been allowed to fall into a lamentable state of decay, and its beautiful chancel was cut off from the Church and unused. In September, 1859, a meeting of the churchwardens and parishioners was held, at which it was resolved to restore their Church. A committee was nominated, and £1200 were collected and expended upon the edifice. The parishioners voted a church rate of 2d. in the pound towards

the restoration fund, and the Dean and Chapter of Durham undertook the whole expense of the chancel. In the years 1870--71, £486 15s. 2d. were expended upon the reparation and enlargement of Holy Island National School.]

*Catalogus Animalium et Plantarum quæ in Insula Lindisfarnense
visa sunt mense Maio A.D. 1854.*

MAMMALIA.

Canis familiaris.
 „ *a.* pastoralis.
 „ *b.* amphibius.
 „ *c.* aquaticus.
 „ *d.* ignobilis.
 Felis domesticus.
 Lepus cuniculus.
 Bos taurus.
 Ovis domestica.
 Equus caballus.
 „ asinus.
 Sus domestica.
 Mus musculus.
 „ decumanus.

AVES.

Falco tinnunculus.
 Turdus merula.
 Accentor modularis.
 Motacilla alba.
 Anthus petrosus.
 Saxicola œnanthe.
 „ rubicola.
 Alauda arvensis.
 Emberiza schœniculus.
 „ citrinella.
 Fringilla cœlebs.
 „ domestica.
 „ cannabina.
 Corvus corone.
 „ frugilegus.
 „ monedula.
 Certhia familiaris.
 Hirundo urbica.
 „ riparia.

Cypselus apus.
 Columba domestica.
 Meleagris gallopavo.
 Gallus domesticus.
 Perdix cinerea.
 Charadrius hiaticula.
 Vanellus cristatus.
 Numenius arquata.
 Crex pratensis.
 Gallinula chloropus.
 Fulica atra:
 Anser domesticus.
 Somateria mollissima.
 Anas domestica.
 Phalacrocorax carbo.
 Sterna hirundo.
 Larus canus.
 „ fuscus.

PISCES.

Trigla gurnardus.
 Gasterosteus trachurus.
 Blennius gunnellus.
 Anarrhichas lupus.
 Callionymus lyra.
 Lophius piscatorius.
 Salmo salar.
 „ eriox.
 Gadus morrhua.
 „ æglefinus.
 „ luscus.
 Merlangus carbonarius.
 Lota molva.
 Motella mustela.
 Platessa limanda.
 Raia clavata.

MOLLUSCA.

Gasteropoda.

Limneus pereger, var. *ovata*.

Planorbis nautilus.

„ *glaber*.

Succinea putris.

Zua lubrica.

Pupa umbilicata.

„ *muscorum*.

Vitrina pellucida.

Zonites cellarius.

Helix aspersa.

„ *nemoralis*.

„ *hortensis*.

„ *caperata*.

„ *rotundata*.

Arion empiricorum.

Limax agrestis.

Eolis papillosa.

„ *coronata*.

Doris bilamellata.

Cypræa Europæa.

Purpura lapillus.

a. alba aut *flavescens*,
lævis.

b. alba, *costulis exasperatis*.

c. cinerea, *lineis albis*
cincta.

d. cinerea fasciis albis 2
vel 3.

Nassa incrassata.

Buccinum undatum.

1. *testa crassa*.

2. „ *tenui*.

* „ *costis undulatis*.

** „ *striata, velutina*.

a. „ ore albo.

b. „ ore flavo.

c. „ ore purpureo.

d. „ ore carneo.

Fusus islandicus.

„ *antiquus*.

Natica nitida.

Littorina littorea.

„ *rudis*.

„ *littoralis*.

a. olivacea aut *atrovire-*
scens, ore purpureo,

b. flava, ore albo.

c. olivacea, fasciata.

Rissoa interrupta.

„ *ulvæ*.

Valvata piscinalis.

Trochus zizyphinus.

a. testa alba.

Trochus cinerarius.

„ *umbilicatus*.

Dentalium entalis.

Patella vulgata.

a. virescens, testa conica,
striata, lævi.

b. saxicava, testa crassa,
lævi, depressa; mar-
gine integro.

c. costata, testa scabra,
costis crebris, margine
inæquali, seu angulato.

d. picta, fasciis luteis et
fuscis.

Patella pellucida.

„ *lævis*.

Acmaea virginea.

Chiton fascicularis.

„ *cinereus*.

Lamellibranchiata.

Anomia ephippium.

„ *aculeata*.

Ostrea edulis.

Pecten pusio.

„ *maximus*.

„ *opercularis*.

Arca tetragona.

Modiola modiolus.

b. testa barbata.

Mytilus edulis.

b. pellucidus.

c. parvus, rupestris.

Cyclas cornea.

Pisidium pusillum.

Cardium echinatum.

Cardium edule.
Cyprina islandica.
Astarte sulcata.
Tapes pullastra.
Venus striatula.

„ *ovata.*
Mactra elliptica.

„ *stultorum.*

Donax anatinus.

Tellina tenuis.

„ *fabula.*

„ *solidula.*

„ *crassa.*

Solen siliqua.

Mya truncata.

„ *arenaria.*

Saxicava rugosa.

Tunicata.

Cynthia grossularia.

„ *rustica.*

Ascidia depressa.

Botryllus Schlosseri.

Polyzoa.

Tubulipora patina.

„ *hispidula.*

„ *serpens.*

Crisia eburnea.

Gemellaria loriculata.

Cellepora pumicosa.

Lepralia nitida.

„ *unicornis.*

„ *immersa.*

Membranipora pilosa.

Cellularia reptans.

Flustra foliacea.

„ *truncata.*

„ *carbacea.*

Alcyonidium gelatinosum.

„ *hirsutum.*

„ *parasiticum.*

RADIATA.

Echinodermata.

Ophiocoma neglecta.

„ *rosula.*

Uraster rubens.

„ *violacea.*

Cribella oculata.

Solaster papposa.

Echinus sphaera.

„ *lividus.*

Amphidotus roseus.

Anthozoa Helianthoida.

Actinia mesembryanthemum.

„ *coriacea.*

Anthozoa Asteroida.

Alcyonium digitatum.

Anthozoa Hydroida.

Coryne pusilla.

Eudendrium rameum.

Halecium halecinum.

Sertularia rugosa.

„ *rosacea.*

„ *abietina.*

„ *filicula.*

„ *operculata.*

Thuiaria thuiaria.

Plumularia falcata.

Laomedea geniculata.

„ *gelatinosa.*

Campanularia intertexta.

„ *dumosa.*

Amorphozoa.

Grantia foliacea.

„ *ciliata.*

„ *botryoides.*

Halichondria panicea.

CRUSTACEA.

Stenorynchus phalangium.

Hyas araneus.

Cancer pagurus.

Carcinus mœnas.

Lithodes maia.

Pagurus bernhardus.

Homarus vulgaris.

Crangon vulgaris.

Talitrus locusta.
Gammarus aquaticus.
Leacia longicornis.
Porcellio scaber.

ACARIDÆ.

Acarus Basteri.

MYRIOPODA.

Julus niger.

INSECTA.

Calathus flavipes.
" mollis.
Ægialia globosa.
Otiorynchus monticola.
Cneorhinus geminatus.
Hydrobius fuscipes.

CIRRIPEDA.

Balanus communis.
" elongatus.
Clitia verruca.

ANNELIDES.

Lineus longissimus.
Prostoma lactiflorea.
Erpobdella vulgaris.
Nephelis tessulata.
Glossiphonia complanata.
" bioculata.
Aulostoma vorax.
Othonia Fabricii.
Lobatula vulgaris.
Spirorbis communis.
" granulatus.
Serpula vermicularis.
" triquetra.
Arenicola piscatorum.
Cirratulus borealis.
Nereis viridis.
Glycera alba.
Sigalion boa.
Polynoe cirrata.
Camponotia eruciformis.

PLANTÆ.

Dicotyledones.

Ranunculus aquatilis.
var. *b. heterophyllus*.
" hederaceus.
" flammula.
" ficaria.
" acris.
" bulbosus.
Caltha palustris.
Papaver rhœas.
Fumaria officinalis.
Cheiranthus cheiri.
Nasturtium officinale.
Cardamine pratensis.
Sisymbrium officinale.
Sinapis arvensis.
Cochlearia officinalis.
Capsella bursa-pastoris.
Senebiera coronopus.
Cakile maritima.
Helianthemum vulgare.
Viola canina, *Sm.*
" flavicornis, *Sm.*
" tricolor, *v. arvensis*.
Polygala vulgaris.
a. flor. cœruleis.
b. flor. carneis.
Silene inflata.
" maritima.
Sagina procumbens.
Honkeneya peploides.
Arenaria serpyllifolia.
Stellaria media.
Cerastium triviale.
" semidecandrum.
" tetrandrum.
Malva sylvestris.
" rotundifolia.
Geranium molle.
" robertianum.
" a. flor. roseis.
" b. flor. albis.
Erodium cicutarium.
" a. flor. roseis.
" b. flor. albis.

Linum catharticum.
Ulex europæus.
Sarothamnus scoparius.
Ononis arvensis.
Trifolium pratense.
 " *repens*.
 " *procumbens*.
 " *minus*.
Lotus corniculatus.
Astragalus hypoglottis.
Prunus spinosa.
Spiræa ulmaria.
Potentilla anserina.
 " *reptans*.
Cratægus oxyacanthæ.
Epilobium hirsutum.
 " *montanum*.
Sedum acre.
Hydrocotyle vulgaris.
Bunium flexuosum.
Sium angustifolium.
Heracleum sphondylium.
Anthriscus hirsutis.
 " *vulgaris*.
Conium maculatum.
Hedera helix.
Sambucus nigra.
Galium cruciatum.
 " *aparine*.
 " *verum*.
Tussilago farfara.
Bellis perennis.
Achillæa millefolium.
Chrysanthemum Leucanthemum.
Matricaria inodora.
Tanacetum vulgare.
Senecio vulgaris.
Carlina vulgaris.
Arctium minus.
Carduus crispus.
 " *tenuiflorus*.
 " *lanceolatus*.
 " *arvensis*.

Lapsana communis.
Leontodon Taraxacum.
Sonchus oleraceus.
 " *arvensis*.
Hieracium pilosella.
Ligustrum vulgare.
Menyanthes trifoliata.
Convolvulus arvensis.
Cynoglossum officinale.*
Lycopsis arvensis.
Echium vulgare.
Myosotis arvensis.
 " *versicolor*.
Hyoscyamus niger.
Rhinanthus crista-galli.
Euphrasia officinalis.
Veronica anagallis.
 " *Beccabunga*.
 " *Chamædrys*.
 " *serpyllifolia*.
Mentha aquatica.
Thymus serpyllum.
Lamium amplexicaule.
 " *purpureum*.
 " *album*.
Anagallis arvensis.
Glaux maritima.
Statice limonium.
Armeria maritima.
Plantago coronopus.
 " *maritima*.
 " *lanceolata*.
 " *major*.
Littorella lacustris.
Salsola kali.
Rumex obtusifolius.
 " *pratensis*.
 " *crispus*.
 " *acetosa*.
 " *acetosella*.
Polygonum aviculare.
 " *amphibium*.
 " *a. natans*.
 " *b. terrestris*.

* Dr. Johnston omits the Oyster-plant (*Mertensia maritima*),⁵ found plentifully on the north-eastern shore of the island, and well known to visitors.—J.H.

Polygonum convolvulus.
Euphorbia helioscopia.
Callitriche verna.
Urtica urens.
 „ *dioica.*
Salix fusca.

Monocotyledones.

Orchis latifolia.
Allium oleraceum.
Luzula campestris.
Zostera marina.
Eleocharis palustris.
Carex arenaria.
 „ *vulgaris.*
 „ *panicea.*
Anthoxanthum odoratum.
Alopecurus pratensis.
Psamma arenaria.
Poa annua.
 „ *pratensis.*
 „ *var. cæsia.*
 „ *trivialis.*
Glyceria plicata.
Dactylis glomerata.
Bromus mollis.
Triticum repens.
Lolium perenne.

Equisetaceae.

Equisetum arvense.
 „ *limosum.*

Musci.

Bryum caespitium.
Dicranum scoparium.
Hypnum cupressiforme.
 „ *loreum.*
 „ *molluscum.*
 „ *sericeum.*
Orthotrichum anomalum.
 „ *diaphanum.*
Tortula convoluta.
 „ *muralis.*
 „ *ruralis.*

Hepaticæ.

Jungermannia nemorosa.

Lichenes.

Borrera ciliaris.
Cenomyce pyxidata.
Cladonia rangiferina.
Parmelia parietina.
Ramalina scopulorum.
Lichina affinis.

Fungi.

Æcidium compositarum.

Algæ.

Halidrys siliquosa.
Fucus vesiculosus.
 „ *serratus.*
 „ *nodosus.*
 „ *canaliculatus.*
Himanthalia lorea.
Desmarestia aculeata.
Alaria esculenta.
Laminaria digitata.
 „ *saccharina.*
 „ *fascia.*
Chorda filum.
Punctaria plantaginea.
Asperococcus echinatus.
Chordaria flagelliformis.
Leathesia tuberiformis.
Ralfsia verrucosa.
Cladostephus verticellatus.
Sphacellaria radicans.
Ectocarpus litoralis.
Odonthalia dentata.
Polysiphonia urceolata.
 „ *fibrata.*
 „ *Brodiaei.*
 „ *fucoides.*
Laurencia pinnatifida.
 „ *caespitosa.*
Chylocladia articulata.
Corallina officinalis.

Hildenbrandtia rubra.
 Delesseria sanguinea.
 Plocamium coccineum.
 Rhodymenia palmata.
 Gelidium corneum.
 Chondrus crispus.
 Ptilota plumosa.
 Ceramium rubrum.
 „ diaphanum.

Ceramium acanthonotum.
 Cladophora rupestris.
 „ lætevirens.
 Conferva implexa.
 Enteromorpha intestinalis.
 Ulva latissima.
 Porphyra laciniata.
 Palmella rupestris.

Notices of Chatton. By the Rev. WILLIAM PROCTER, jun.,
 and JAMES HARDY.

THE history of Chatton was shortly told by Wm. Dickson, Esq., on occasion of the meeting of the Club there on the 28th May, 1857. This short history is given at p. 31 of the "History of the Club" for 1856-62, and all that we propose is to add a few details to it. The writ of King Edward I., written from Chatton, printed there, is curious as shewing the minute accuracy of that great king in controlling his expenditure;—issuing an express order to the Barons of his Exchequer, for the payment of £2 6s. 8d. for the annual dress of two Welshmen and a boy, employed probably as keepers of his hounds at Bamburgh Castle; and of £6 1s. 4d. for their wages for the 182 days between the 14th February and 15th August, at 8d. a-day for the three. Some of the members of the Club will be glad to have a translation of this interesting document:—

"LIBERATE ROLLS, IN THE 19TH YEAR OF EDWARD I., m. 2.

"The King to the Barons of his Exchequer, Health. Award to Walter de Cambehou, constable of our Castle of Bamburgh, among the expenses of his Bailliwick, forty six shillings and eight pence, which he has paid by our order for the working dresses of Rees ap Maylgon and Canau ap Merdath, Welshmen residing in the aforesaid Castle, and of one boy serving them; that is to say, for the dresses of Rees and Canan, forty shillings, and for the dress of the aforesaid boy, six shillings and eight pence of the nineteenth year of our reign. And six pounds and sixteen pence, which in like manner by our order he has laid out on the expenses of the aforesaid Rees and Canan and their boy, dwelling in the aforesaid Castle, from the Friday next before the

feast of Saint Valentine the Martyr (14th February) in the nineteenth year of our reign, up to the Wednesday in the feast of the Assumption of the Blessed Virgin Mary (15th August) in the same year; namely, for the expenses of each of the aforesaid Rees and Canan, threepence a day, and for the expense of the said boy, two pence a day,—unless he has had before an award from thence (from the Exchequer) in whole or in part.

“Witness the King at Chatton, on the 16th day of August.”

Edward I. reigned from 20th November, 1272, to 7th July, 1307, so that 19, Edward I., is A.D. 1291. And we learn from “*Documents Illustrative of the History of Scotland, 1286–1306*,” edited by the Rev. Joseph Stevenson, that Edward I. was at Chatton, 16th August, 1291; for, a letter of Protection to John of Douai, a merchant sent by John de Soules to France, of that date, was issued by Edward I. himself: “*Teste rege, apud Chattone, xvj die Augusti.*” (“*Documents*,” Vol. i., p. 219.) The king was at Berwick on the 11th August. (*Ib.*, p. 219.) On the 13th he had arrived at Chatton, for on that day he granted letters of Protection, dated at Chatton, 13th August, for the men of Robert le Brus, Earl of Carrick, going into Ireland to import into Scotland, corn, wine, and victuals, and directed to all the king’s bailiffs in Ireland and Scotland. (*Ib.*, p. 239.) We thus find him at Chatton from the 13th to the 16th of August, 1291. The object Edward had in view at this period during his visits to Chatton and the Borders, was secretly to influence the deliberations of the Scottish Parliament on the claims of the competitors for the Scottish throne, left vacant by the decease of the Maiden of Norway, without his directly appearing to interfere with their decisions. Delaying his final adjudication in favour of Baliol till 17th November, 1292, he lingered on the Border with his troops for most of that year. We learn from the recently published “*Documents*,” that he was at Berwick on the 14th July, 1292, and at Chatton on the 18th and 19th of the same month; for on July 18th, 1292, he gave letters of Protection to Osbert de Spaldington, about to proceed to the Isle of Man—“*Teste rege apud Chattone*” (*l. c.*, p. 337); and on July 19th there is a mandate from Edward himself, “*Teste meipso, apud Chattone*,” for the Chamberlain of Scotland to pay the wages of Roger de Burton and Osbert de Spaldington. (*Ib.*, p. 335). This shews that Edward exercised regal power in Scotland during the vacancy of the throne.

It also appears by "Extracts from the Household Roll of King Edward," that he was at Norham, November 20, 1292; at Werke, from November 21 to 26; at Roxburgh, from November 27, to December 2; at Mersington, December 3 and 4; at Roxburgh, from December 5 to 11; at Werke, December 12; at Ford, December 13; at Chatton, December 14; at Tughale, December 15 and 16; at Alnwick, December 17; at Warkworth, December 18; at Wodehorn, December 19; and so on, by Horton and Tinnmouth, to Newcastle, where his latest stay was December 27. (l. c., pp. 368-373.) Two of these extracts are given thus:

"FORDE.

Dec. 13. Die Sabbati (Saturday), Summa, xxv*l.* xs. xj*d.*, o.
Vinum de stauro, lxii*j.* sex., cera vj^{xx}v*l*b.

CHATTONE.

„ 14. Die Dominica sequenti, Summa, xxxiii*j.*l. xvs. xj*d.*, o.
Vinum de stauro, cx. sex., cera cxxv*l*b."

"Sex." = sextarius, $1\frac{1}{2}$ pint, the contents of a bottle; 63 bottles of wine were consumed from the store or cellar (stauro) at Ford, and 126 wax candles; and the next day, Sunday, 110 bottles of wine and 125 wax candles were made use of at Chatton. The other expense of the Saturday at Ford was £25 10s. 11*d.*; and of the Sunday at Chatton, £34 15s. 11*d.* This shews that the king was accompanied by a considerable company, probably of soldiers, whose principal officers would dine at the king's house.

What accommodation there was in the village for a king's retinue is uncertain; but some house with a store there had been. The exigencies of a subsequent age, when the bitterness between the realms rendered country residences insecure, compelled two mansions in the place to be converted into defensive strengths; but of their age we are not told. Either of them could have entertained the king. These two towers are mentioned in a list entitled, "Nomina Castrorum et Fortalaciorum infra Comitatum Northumbriæ," made A.D. 1460:—

"Turris de Chatton..... Vicarii ejusdem.
Turris de eadem Roberti Forster."

A century later, the inhabitants still had for refuge these village forts, which would be sufficiently provided to repel a Border raid. This we know from "The State of the

Frontiers and Marches," &c., by Sir Robt. Bowes Knight, 1550:

"The Towneschippe of Chatton conteyneth xxx husbandlands plenyshed of the Kyng's Maties. inherytaunce late of the Erl of Northumberland's lands. In yt is two lytle towers without barmekyns, thone of thinherytance of the said Richard Fowebery and Thother ys the mansion of the vyccaredege."*

Nor did Chatton escape devastation; for in 1368, the Manor was ruined. This appears from an Inquisition, 42 Edward III., of which the late Mr. Tate in his "*History of Alnwick*" has furnished a digest; which also reveals by a glimpse into the past, the ancient condition of Chatton and its neighbourhood.

"In the town of Chatton, parcel of Alnwick, is a manor ruined, the herbage of which renders three shillings and fourpence; and one hundred and eighty acres of demesne land render sixpence per acre; there are twenty-seven bondagia, eighteen of which are in the hands of tenants at will, each rendering thirteen shillings and fourpence, the other nine are desolated and lying waste, and for herbage each renders three shillings and fourpence; thirteen cotagia render each twelvecence; one water mill £8, of which £4 being paid to the 'renowned chapel' at Chatton, there remains to the lord £4; a certain severall pasture called 'Musgrave Schell,' renders for herbage sixty shillings; a park with wild animals called 'Kelsowe' is of no value beyond the maintenance of the wild animals; free tenants render £6 14s.; and the perquisites of the Halmotes are worth four shillings."†

These payments were due to Lord Henry de Percy (probably the third Baron Percy), who held the boroughs of Alnwick and Alnmouth, and the towns of Alnwick and Lesbury, Great Houghton, Chatton, Alnham, and a pasture called Swinlees, by homage and fidelity, and by service of twelve knights' fees, and as parcel of the barony of Alnwick, and also by service of sixty shillings yearly paid to the king's exchequer.

This Inquisition shows that in 1368, there were in Chatton twenty-seven Bondagia, and thirteen Cotagia, held directly under the Lord Baron. Their occupants were tenants at will, with rents of 13s. 4d. and 1s. respectively‡.

* Hodgson's "*Northumberland*," Part iii., Vol. ii., p. 187. In 1475, the Folberries held "one parcel of land in Chatton."—Tate, i., p. 350.

† "Tate's "*History of Alnwick*," Vol. i., p. 138.

‡ William, the son of Ulfkill, held by soccage at Chatton, in the barony of de Vescy, half a caracute of land, by payment of half a mark.—"*Testa de Neville*"—Hodgson, v. p. 209. [A caracute consisted of 8 bovates, and each bovat of 10, 12, 13, or 14 acres, or otherwise, according to the quality of the land.—See Coldingham "*Account Rolls*," &c.]

It is not improbable that the wild animals mentioned in the park at Chatton in 1368, were the same as are still kept in Chillingham Park. The park called "Kelsowe" cannot at present be identified, but it lay somewhere on "Chatton Moor."* It probably consisted of the 200 acres or thereabouts which Edward I., in 1292, detached from the barony of Alnwick and disafforested†. Did he himself pursue the chase therein? We know from returns, dated from Plumptre (Northamptonshire), 1296-7, that King Edward enjoyed the sport of hawking, and that Patrick Earl of Dunbar accommodated him with the loan of a falcon, and the services of Elias Spot, the earl's own falconer, to take charge of it while the king lived there in retirement‡. The probability is, that he took his pastime during his various progresses on the Borders.

The royal appropriation of this 200 acres appears from an inquiry before the Justices in Eyre, A.D. 1292, into the manorial rights of the Great Barons; and the return as contained in the "*Rotuli Hundredorum*," so far as it relates to the power and privileges of the Barony of Alnwick, is given in Mr. Tate's "*History*," i., p. 94. It supplies important information on the power of the demesne lord in Chatton territory, and after quoting it there will be no need for further references to his prerogatives:—

"William de Vesci was brought forward that he might on this day, here show, by what warrant he claimed to have the chattels of felons condemned in his own court of Alnewyk, gallows in Alnewyk, market and fair, tumbrell, pillory, toll, correction of the assize of bread and ale broken in Alnewyk, Chatone, and Alnemuthe, free chace in Alnewyk, Alneham, and Chatone, and free warren in all his demesne lands in the villis aforesaid, &c.

"And William, by his attorney, came and produced a certain charter, made under the name of lord Henry king, father of the present lord king, to a certain William de Vesci, father of William himself, whose heir he is, by which the same lord Henry king grants to the aforesaid William his father, that he and his

* A park of the de Vescies within the precincts of Alnwick forest, in which domestic cattle were grazed, is written *Walsow*, *Walshow*, *Walshowe*, from 1260-1297. Mr. Tate thinks that the termination is *how*, a rounded hill; but are not this and "Kelsowe," corruptions of *Leasow*, a pasture-ground?—J. H.

† "*Anno 7o Ed. I., Mem'. 79, Joh' es de Vescy—Chatton mora diafforesta.*"—Hodgson, Vol. v., p. 47., "*Eschaet*," &c.

‡ Stevenson's "*Documents*," &c., iii., p. 137.

heirs should have ever one market at his own manor of Chatone in the county of Northumberland, weekly on Wednesday, and one fair yearly, to continue for eight days, to wit, on the vigil, and on the day, and on the morrow of the Exaltation of Holy Cross (Sept. 14), and for five days following* . . . , and so he claimed the liberties contained in the aforesaid charter; and the other liberties contained in the brief, he claimed from antiquity. And he said that he and all his ancestors from time immemorial used them uninterruptedly, *excepting in about two hundred acres of wood and moor in Chattone, which were within the forest, but afterwards by the present lord king were disafforested, and in these he claimed not chase and warren."*

In 1634 the tenants of Chatton complained in the Baron Court of Alnwick of Sir Ralph Grey of Chillingham taking land of Chatton without right, and enclosing from Chatton Common†. This encroachment may refer to the enclosure made by the park-wall of Chillingham, which projects with an elbow into Chatton Moor on the west. Robin Hood's Bog, to which, when disturbed, the wild cattle habitually resort, and to which tradition points as their pristine habitat, is at the extreme elbow of this conjectural intake. Can Sir Ralph Grey, or any of his predecessors, have enclosed what was once "the Kelsowe"?

The Inquisition of 1368 states the value of the manor of Chatton to be £35 2s. 4d.; whereas in 1289, it was valued at £68 16s. 1½d., a falling off caused probably by the waste of the Border wars.

In parliament of the 6th year of Richard II. (1382), the two representatives of Northumberland, Adomar de Athol and Ralph de Eure, had wages at 6s. per day, for which a county cess was levied, and Chatton as its share paid, "iiis. ivd."‡

Reveley is a prominent name among the inhabitants of Chatton about 1550. In Hodgson's "Northumberland," is given a list of the gentlemen, inhabitants of the East Marches, in 1550, one of whom is: "Thomas Reveley, Baylive of Chattone." And in an order for night watches against Scotch invaders in October, 1552, Thomas Reveley

* The right of holding market and fair at Chatton and Alnmouth was granted to William de Vescy, 37 Hen. III., A.D. 1253.—Hodgson, part iii., Vol. ii., p 391. Mr. Tate makes the day of the fair to be on "the beheading of Saint John the Baptist." It is here corrected from the original.

† Tate's "History of Alnwick," i., 351.

‡ Appendix to Wallis' "Northumberland," ii., p. 3.

is appointed to set the watches at Lyem bridge, the Bullford, and the Kyrk-ford upon the Till, within the bounds of Lyem and Chatton; and the same Thomas Reveley, Bayleff of Chatton, was appointed a commissioner for the inclosures of the East Marches, "from Glen to Bremish between Tyll and Cheviott." By the same ordinances, men of Chatton, with other places named, kept the nigh-watch "from Langley-ford to Ryden-burne"; the fords from Lyham to Chatton being watched by men from Lyem, Hessilrigge, Bell-ford, and Howburne*.

Chatton, with various other townships in the barony, was obliged annually to send armed men to guard the town of Alnwick during the fair. Chatton and Chillingham provided four men, and the custom is still binding†.

The townships in this parish are Chatton, Coldmartin, Fowberry, Hazelridge, Hetton, Hettonhouse, Horton, Lyham, and Weetwood.

The Church at Chatton was parcel of Alnwick Abbey. William de Vescy, son of Eustace de Vescy the founder of the abbey, by a charter between the year 1157 and 1184 granted the church of Chatton "to God, and the church of St. Mary at Alnwick and the Canons of the Premonstratensian order—servants of God—in that place," for the salvation of himself, his father Eustace, and mother Beatrix, and of all his ancestors‡. The name of Hugo, "sacerdos de Chetton," witnesses the similar grant of the church of Chillingham, by the same bountiful patron to the same convent; and Bernard, "parsona de Chettone," witnesses another grant of this William de Vescy to the same. In a farther gift, by another William de Vescy, who flourished from 1215–1250, of a toft in "Villa de Chettone," containing a circuit of 44 perches, each perch containing 20 feet, also to this abbey, we have probably the names and number of the resident clergy at Chatton, at the period of the donation. They were Master Robert Bataill, then vicar, and Roger and Andrew, "clericis de Chettone." The two first belonged to the Church as it existed before its settlement in 1224, when Lord Richard de Vesci (Canon of Beverley) was vicar. De Vesci may have been succeeded by Robert Bataill, who had two assistant curates. With regard to the toft, or building

* Nicolson's "Border Laws," p. 212, &c.

† Wallis, ii., 383; Tate, i., p. 441.

‡ Tate's "Alnwick," ii., p. 5; and Appendix, p. ix. (abridged).

site; at the dissolution, about 1539, Alnwick Abbey held in Chatton, two tenements, at a rental of 8s.*

September 20, 1224, is the date of a "Deed of Ordination, or Settlement of the Church of Chatton," by Richard de Marisco, Bishop of Durham—and chancellor of England at the beginning of the reign of Henry III.†

"To all the faithful in Christ,

"Richard, by the grace of God, Bishop of Durham—greeting in the Lord.—'Know ye that whereas our beloved sons in Christ, the Abbot and Convent of Alnwick of the one part, and Lord Richard de Vesci, Vicar of the Church of Chatton, and Canon of Beverley, of the other part, have of their own accord and absolutely placed under our disposal whatever right they have in the said Church at Chatton, we have ordered concerning the same church after this manner, that is to say, that the collation or donation of the Vicarage of the said Church of Chatton *shall remain in us and our successors for ever*, which Vicarage shall consist for ever of all obventions, small tithes, revenues and proceeds of every kind to the said Church and its Chapels belonging by whatever name they are called, except the tithes of corn and the land of Doddington which belongs to the aforesaid Church, from which land nevertheless the Vicarage of the aforesaid Church of Chatton shall have a competent Manse for ever: but all the tithes of corn to the said Church of Chatton, and its Chapels belonging, we have granted, and by this present writing confirmed unto the Abbot and Convent of Alnwick to be taken and converted to their own proper use—but the Vicar to whomsoever the said Vicarage shall be collated by us and our successors, shall personally reside in the same, and shall keep up the ordinary burdens to the said Church of Chatton belonging, and shall have the said Manse in the said village of Doddington, and also the land which belongs to the Church in the village of Chatton for ever.

"And that this our said ordination may be firm and lasting, as well our seal, as the seal of the Chapter of Alnwick have been affixed to this writing. Before these witnesses. Symon, our chamberlain; William of Arundel; Godfrey, Vicar of Woodhorn; Michael, Vicar of Benton; Hugh de Goherst; Stephen de Burton; Roger de Lacy, our client, and others. Given at Auckent [Auckland] by the hand of Henry our chaplain, on the morrow of St. Michael, in the eighth year of our Pontificate.'"[†]

* Ibid, p. ix., xi.; Ibid, p. 26.

† Hodgson, iii., Vol. ii. Reg., i., Eccles. Dunelm, part 2, p. 5.

‡ Raine makes 1217 the first year of his Pontificate, which is also the date specified in the "Chronicle of Melrose."

The patronage probably remained in the hands of the Bishop of Durham till the Reformation, on the eve of which the Abbot and Convent of Alnwick seem to have presented a vicar in 1507; and in 1549, Edmund Ryveley and others seem to have assumed the right of presentation for the Abbot and Convent of the lately dissolved Monastery of Alnwick. At the next vacancy of the vicarage in 1560, Thomas Percy, Earl of Northumberland, presents the vicar, and the patronage has continued in the hands of the Percy family ever since.

In the taxation of all the churches and benefices, 1254, Chatton is placed in the deanery beyond the Coquet, and is valued:—

“Chatton..... cx. marc. Dec. vij.
Vic’xxxv. marc. Dec. ii.”*

In the taxation of 1292, for tenths of all ecclesiastical benefices granted by Pope Nicholas IV. to Edward I., towards the expenses of a crusade, Chatton stands thus:—

“Chatton Rector’£100 0s. 0d.
Vicar’ ejusdem £50 0s. 0d.”†

In the Procuration paid by the clergy in Northumberland in 1357, the

“Rectoria de Chatton non valet ultra....xliij*li*., et solvit xxjs.
Vicaria ejusdem non valet ultraxiiij*li*. vjs. vii*jd*., et solvit vjs. vii*jd*.”‡

In 1539, the farm of Chatton rectory amounted to £44 6s. 8d.§ For the disposal of the tithes of the parish at the dissolution of Alnwick Abbey, see the “History of Alnwick,” ii., pp. 23, 28, 31, 32.

In the Oliverian Survey of Northumberland, 1650, the return is:—

“That the Parish of Chatton is a Vicaridge, the Earle of Northumberland, patron, Mr. James Henderson, minister, and the yearly value is thre score pounds.”||

The following list of the Vicars of Chatton up to 1775, with a few supplements, is taken from the Randall MS., printed in the appendix to Hutchinson’s “Northumberland”:

* Hodgson, part ii., Vol. iii., p. 422.

† “Taxatio Ecclesiastica Angliæ et Walliæ auctoritate P. Nicholai IV.” Printed by command, &c., 1802, fol. p. 317.

‡ Hodgson, part ii., Vol. iii., p. 427.

§ Tate’s “Alnwick,” i., p. 142.

|| Hodgson, V. iii., p. lxxviii.

“CHATTON VICARAGE.—Dedication—Holy Cross. Priory of Alnwick,—Prop. —The Duke of Northumberland—Patron.

King's B. } Yearly T. } Proc. Epis. } Proc. Arch. } Real Vlu.
£126 16s. 0½d. } £1 5s. 7½d. } 8s. 8d. } 12s. } £200.

VICARS OF CHATTON.

	A.D.
[Hugo Sacerdos de Chetton.] [Chart. Alnwick Ab. circa 1157-84.]	
[Bernard Parsona de Chetton.] [Ibid,	”
[Richard de Vesey, Vic. et Canon.] [1224.]	
[Robert Bataill, Vic.] [Ibid,	1215-1252.]
Hen. de Herdeslawe	1311.
John Cuthbert	
Tho. de Wollore, p. resig. Cuthbert	1418.
Will. Marshall, p. mort. Wollore	1432.
Joh. de Bamburgh, p. res. Marshall	1437.
Hen. Castle, p. mort. Bamburgh	1456.
Tho. Sandeforth	
Dns. Can. regularis Eccl. conventualis de Alnewyke, p. mort. Sandeforth	5th July, 1507.
Pr. Ab. et Co. Mon. de Alne	
Will Marshall	
John Lambert, Cl., p. mort. Marshall	4th March, 1549.
Pr. Edw. Ryreley (Ryveley?), et als. p. Ab. et Co. nup. dissol. Mon. de Alnewyke	
Will. Heryson, Cl., p. mort. Lambert	2nd Feb., 1560.
Pr. Tho. Percy, Mil. Com. Northum.	
Hugh Errington, p. mort. Heryson	12th March, 1563.
Pr. Dn. Tho. Percy	
Edward Cowston, Cl.	28th March, 1576.
Edward Muschamp	1612.
Edw. Haneson, p. mort. Muschamp	1631.
Jam. Duncanson, an Intruder*	
Edward Henderson	16th Aug., 1611.
Tho. Wetherley, A.B.	4th May, 1666.
Adam Felbridge, p. mort. Wetherley	1681.
Cha. Hammond	1700.
Cha. Wood, A.M.	1711.
Will. Burrell, A.M.	1713.
Saml. Hall, A.M.	20th July, 1752.
[Will.] Stoddart [p. mort. Hall]	1775.
Saml. Hall, A.M., p. mort. Stoddart	1782.
Joseph Cook, A.M., p. mort. Hall	1799.
Matthew Burrell, A.M., p. mort. Cook	1844.
Court Granville, A.M., p. mort. Burrell	15th July, 1869.
Henry Edward Bell, A.M., p. mort. Granville, 13th June, 1871.	

* There is probably a mistake in Randall here, and a confusion of names.
—See “Oliverian Survey” already cited.

In addition to the Church, there was at an early period at Chatton, a Chapel, dedicated to St. Edmund, King and Martyr. Mention of it occurs in an Inquisition on Henry de Percy, March 21, 26 Edw. III. (A.D. 1352):—

“There is also in the same place a certain water-mill, which is worth and pays eight pounds a year at the same terms; and of that four pounds a year are paid to a certain chaplain celebrating divine ordinances* in the chapel of St. Edmund at Chatton (divina in capella Sancti Edmundi apud Chatton), from a grant made long ago by a certain Lord of Chatton.”†

There is, however, nothing in these terms to sanction the epithet “renowned,” applied to it in Mr. Tate’s digest of the Inquisition of 1368. At that date the advowson of the Chapel of Chatton, worth sixty shillings, belonged to the castle and manor of Alnwick‡. The mill was part of the barony of de Vesey; and the founder of the Chapel was probably of that family: most likely Eustace, who married Margery or Margaret, the illegitimate daughter of William, King of Scotland, for he, in 1208, obtained from King John a fair at Alnmouth on *St. Edmund’s Day* (20th November) and the day following §—shewing in that a predilection for this East-Anglian saint, which cannot be predicated of any other lord. We find the same Eustace and his wife building a chapel in the courts of Sprouston, where they might have divine service; and the like purpose may have been intended by that at Chatton. Chapels were numerous in those days||.

The old Church of Chatton is supposed to have become ruinous about 1763, when it began to be rebuilt. The rebuilding and refitting were completed in 1770. It had a bare and barn-like appearance, but after the institution of the Rev. Matthew Burrell, in 1844, the parish Church was restored, with enlargement to a handsome ecclesiastical structure; and the vicarage house and grounds made perfect

* “Divina celebrare,” signifies “to sing or say mass,” in a Paper of date 1250, relating to St. Andrew’s in Scotland.—See Goodall’s Preface (p. xvi) to Keith’s “Catalogue of Scottish Bishops,” Edin., 1755.

† “Proceedings of the Archæological Institute,” 1852, Newcastle, Vol. ii., Appendix, cxxiii. Communicated, with other notices, by Mr. R. G. Bolam.

‡ “History of Alnwick,” i., p. 142.

§ This grant to Eustace appears to have been superseded by that to William de Vesey, his son, who in 1253, obtained a fair for eight days at Alnmouth, beginning on the day of the beheading of St. John the Baptist (August 29).

|| “Hist. of Alnwick,” i., p. 71.

in every comfort, and handsome in appearance—very different from the embattled “*Turris*” of 1460 and 1550, reared in dread of the marauding Scots.

On the 6th March, 1814, “as the sexton was digging a grave, *on the north side of Chatton Church*, he found a stone coffin about ten inches below the surface. It was securely and neatly covered with three stones. In the coffin were the remains of a human body. The skull was nearly perfect, and the teeth of the upper jaw were a full set; the thigh bone measured eighteen inches; but the skull was nearly full of water. The adjacent earth being carefully dug up and trindled, one of Robert Bruce’s silver pennies was found, also a steel spur, and several relics of ornamental brass and iron work, supposed to be the remains of the helmet of the warrior who had been interred in the coffin.”* It was conjectured by the Rev. J. Cook, that it might have been one of the followers of Robert Bruce, who had fallen in 1318, during an invasion of Northumberland; and being, like the Scots of that period, under papal excommunication, his remains had been interred in what was then considered the least hallowed spot of the churchyard. Mr. Bell, the present vicar of Chatton, says that the stone coffin “for some time was placed in the chancel, but was removed some years ago and buried in the churchyard.”

The Parish Registers of Chatton are complete from 1715. All before that date have been lost. The parish school and school-master’s house are provided by the Duke of Northumberland, and are well managed and efficient, under the superintendence of the vicar, the National Society, and Government Inspectors.

The population of Chatton parish in 1801, was 1,135, in 1811, it was 1,378; and in 1821, it had increased to 1,460: consisting of 744 males and 716 females, distributed in 280 families, occupying 274 houses†. The population in 1831 was 1,362; and the inhabited houses, 285. In 1851 there were 305 inhabited houses, and 1,765 inhabitants. In 1861, 310 inhabited houses, and 1,651 inhabitants. In 1871, 286 inhabited houses, and 1,538 inhabitants. In 1867, there were 68 duke’s cottages, each with about five acres of land

* “*Archæologia Æliana*,” Vol. i., p. 100.—Mackenzie’s “*History of Northumberland*,” i., p. 387.

† See Parson and White’s “*Northumberland*,” ii., 449.

attached. In 1873 there are 60—most comfortable tenures for the labouring poor.

In 1663, the rental of the Earl of Northumberland's land and mill in Chatton was £300; and the rates, £1 17s. 6d.; Lord Gray for the value of the tithes, £80; rated at 9s.; the Earl of Northumberland for the mill, £20; rated at 2s.* The rental of the parish for the courts and gaol in 1809 was £16,202 8s. 6d.; the annual value in 1815 for the property tax was £14,910. The value in 1873 for the poor rates was £15,886 3s. 6d. The poor rates in 1837 were £811. The contents of the parish by the Ordnance Survey are 17334·786 acres; and of the township of Chatton alone, 6554·268 acres.

The two following domestic incidents are curious illustrations of the superstition and rough manners of bygone times:—

Newcastle, 21 Aug., 1650.—“Jane Martin, the millar's wif of Chattin (was executed) for a wich.”†

Baron Court, Alnwick, 1638.—“Chatton, Ralph Hebborne, for robbing of Lyonell Tyndale's wheat, being a thafe, amerced for his fault 3s. 4d., and his wife, being a scold, 3s. 4d.”‡

In the churchwarden's presentments we have in Spearman's MS. for Chatton vicarage:—

“21 Oct., 1681. Church out of repair.”

“Present. Ralph Muschamp, &c., for not coming to church.”

“Will. Brown, Thos. Burrell, Robt. Swinburne, &c., for not paying church dues.”

[An inspection, with which Mr. Middlemas has favoured me, of attested copies of the Inquests of 1356 and 1368, on the deaths of Lord Henry Percy II. and III., respectively, enables me to bring some incidents about Chatton into the regular line of history, and also helps to explain the partially dilapidated condition of the township in 1368. In 1352, the destruction of the manor is represented as being quite recent, and in the body of the record, under Denwick, the depreciation of property there is attributed to the “ever troublesome Scots, and enemies of our Lord the King.” Lord Percy had not long before cruelly burnt and spoiled Scotland, and roused against himself and all his belongings a nest of

* Kerr's “Old Book of Rates,” p. 39.

† Richardson's “Table Book,” i., p. 282.

‡ Tate's “History of Alnwick,” i., p. 351.

hornets with most vindictive stings. The latest inroad of the Scots was in 1349, but there had been stealing incursions, during an interval of truce, in previous years. In 1352, out of twenty-seven bondagia at Chatton, eleven lay waste and uncultivated; and out of thirteen cottages, eight were tenantless. The record accounts for this, and the complaint is re-echoed from nearly all the other villages, from the want of tenants, of the destitution of the country. In 1349, a great plague, from which no quarter of the known world was exempt, cutting off, it is said, one third of the human race, had reached the Borders, and at length forced the Scots, who had mocked at it as "the vile death of the Englishmen," to suspend their animosity and succumb to the general calamity. According to Fordun, it was chiefly the middle and lower classes who became its victims*. War could not so utterly have swept off the inhabitants, without leaving heirs; so that these were probably plague-stricken tenements which were thus depopulated. Even in 1368, several still lay unoccupied, as if a curse rested on them. "Solebant jacere vasta," says the record. War and the plague combined had been followed by a dearth. Reckoning fifty holdings, bond and free, and there must have been more, with four individuals in each household, there were at least two hundred inhabitants in the township; of whom nineteen families, or seventy-six persons, had either perished or been scattered abroad. Each bondagium in 1352 comprised a dwelling house and appurtenances, with twenty-four acres in land and meadow, rented at 13s. 4d. per annum, and each cottage paid 2s. The wild animals in the park were either so diminished or destroyed that its herbage was let at 50s. As already hinted, the "renowned chapel" of Chatton is a misnomer, Mr. Tate having misread the passage, which is "cuid' capell' celebrant' apud Chatton," i.e., to a chaplain ministering at Chatton; there being no allusion to the chapel itself.

Chatton Feast is held on the first Sunday in September; the Monday following being devoted to games. From changes in the calendar it has probably been diverted from the 14th September, or Holyrood-day, which would be the feast of the dedication of the Church.—J. H.]

* Fordun's "*Scotichronicon*" lib. xiv., c. 7. Stowe's "*Annales*," by Howes, pp. 245, 246. Ridpath's "*Border History*," p. 340.

Notice of James Service, the Chatton Poet. By JAS. HARDY.

THE rustic poet has too often the fate of one of his own wild flowers ; if it is not seized and prized in the blush of vernal loveliness, it is soon outrivalled and outshone by an outburst of other aspirants, and perishes neglected. The verses of James Service when read, as was my experience, among a host of other productions of Northumbrian village bards, are superior in execution, elevation, and power ; but his fame has faded, even from his native village, where he is but faintly remembered as having once been the school-master. He had early gone to sea, perhaps induced by the example of Lieutenant Samuel Cook, son of the vicar, whom he fervently eulogises in his verses. Young Cook, in an encounter in the "Swallow" frigate with a vessel of superior force, gallantly took a French colour, which hung suspended for many years in the chancel of Chatton Church ; where in the poet's imagination, it—

"Waved on high its dusky folds,
Whispering Cook's undying name."

But Service had no fervent admiration of a sea-life—

———"He had been reared,
Among the mountains, and he in his heart
Was half a shepherd on the stormy seas."

Fondly from ship-board he looks back upon the scenes of his boyhood, in the "grey land of old renown, Northumbria"—

"No more I mark upon thy winding, Till,
Morn's blush of joy, or evening's parting gleam.
No more 'tis mine, by that remember'd stream,
To press the green my steps in boyhood pressed,
And cherish many a wild romantic dream
Of future raptures ne'er to be possessed,
And many a growing hope, since bitterly repressed.

* * * * *

No more I gaze upon my native Cheviot's peaks,
Breaking the soft blue of the summer sky,
Whose every tint their heathy summit streaks.

* * * * *

There is one spot beloved o'er all the rest,
Through many a weary year of absence gone—
Ere I became of other realms a guest,
That oft in lonelier hours I mused upon—
The village of my birth—that loved romantic one!

Chatton! the world around convulsed may be—
 States perish and revive—kings rise and fall—
 But I will ponder still on thine and thee,
 And oft thy calm and silent scenes recall.
 E'en now, within thy holy fabric's wall,
 Methinks I stand, and o'er the chancel nave,
 Behold that trophy from the vaunting Gaul,
 When battle's voice of thunder shook the wave,
 Torn by a gallant youth, the foremost of the brave."

The following, addressed to Lieut. Cook, is one of the author's best passages, and is essentially biographical:—

"For me!—where'er the rushing blast
 And foaming waves my steps have cast,
 Through many an year from strand to strand,
 Afar from Albion's parent land—
 Still with my fate vain war to wage,
 And brook the midnight tempest's rage,
 When wild destruction seemed to mark
 For instant doom the groaning bark;
 And eyes grew dim, and cheeks grew pale,
 As dashed the surge and rent the sail—
 To toil where icy crags arise,
 Or droop beneath the torrid skies,
 Remote from all congenial ties;
 There have I urged my minstrel lyre
 With all a rugged seaman's fire!
 Alas! its proudest notes were lost
 On many a distant foreign coast;
 Lavished on wilds and deserts drear,
 And destined ne'er to meet thine ear.
 Even now upon the rocking mast,
 Where howls above the midnight blast,
 And clouds are gathering fast on high,
 And shrieks the sea-bird wildly by,
 And foams beneath the raging sea—
 Even now I raise the song to thee!"

One of his youthful associates was Mr. Robert Tindale, of Broomhouse, adjutant of the Percy Volunteer Infantry, whose loss he deploras as the "first"—

"And best, perchance, of all for whom
 Soft friendship's early glow I nursed."

Tindale's remains had been gathered to the silent tomb, while Service like a detached leaflet floated deviously—

"Where'er the blast or rushing foam
 His restless bark of life might drive."

From his writings we glean that, when abroad, he visited Hindostan. One of his poems is headed, "Stanzas on leaving Bengal, written at Diamond Harbour, on board the ship *Rockingham*." He had been at home in 1820 and 1821. At p. 117 he speaks of being a hapless emigrant, and at p. 118 are verses on leaving England for the West Indies; and at p. 120 he commemorates "William Wilson, a particular friend, who died December 16, 1841, in St. George's Town, St. David's Island, Bermuda." His first publication was, "The Wandering Knight of Dunstanborough Castle, a Northumbrian Legend; and Miscellaneous Poems. By James Service. Alnwick, printed for the author, by William Davison. 1822." (pp. 136, 18mo.) It was about that date, or in 1823, that, according to my informant, he officiated as school-master at Chatton. He was not prepossessing in appearance, being "a short man, not very well faur'd," *i.e.*, not over handsome, and rather too fond of the bottle—a propensity which the hospitalities of the hard-drinking farmers, whose board he frequented, was not calculated to discourage.

From a paragraph in the "Newcastle Magazine" for Oct., 1827, he was then again proposing authorship; and a specimen is given of "Part of a Chapter of a Voyage to India: Hindoo Castes, Parias, Morals and Manners, Literature, &c."—a "work about to issue from the press." The editor remarks, "from his observing mind and generally correct judgment, his personal residence in India must have enabled him to add considerably to the stores of knowledge on almost every subject connected with our Eastern empire." This proceeded, I suppose, no further than the announcement. Another poetical attempt, which I have not seen, is entitled "Metrical Legends of Northumberland."* When Richardson's "Table Book" was issued in 1842, he contributed verses dated from Temple, near Warenford. Like his own "wandering knight," he was unsettled. Years previous he was conscious that his life had been a failure—

"Alas! with youth's warm hopes have died

Youth's soaring energies of soul.

My powers of song, my minstrel pride,
Have found their final goal!

My heart is cold—my hopes are o'er—
And I can feel—but sing no more."

* I have since heard that this work, which was published by W. Davison in 1834, was edited and not written by Service. Some of the productions are his.

There are good lines and striking passages in his poetry, but no one single piece is thoroughly finished. His principal production is a version of the Legend of Dunstanborough Castle. These old tales require judicious treatment not to spoil their flavour. Mr. Service's is a somewhat meretricious rendering, in no fixed measure, of what should only be a simple ballad. His strength lay in his patriotic impulses and yearnings for home; and we can still good-naturedly echo his genuine praise of his "loved Northumbria," that "romantic land of chivalrous renown," in lines thus deftly handled:—

"No! o'er thy plains and mountain summits bleak,
Adorned with many a mouldering tower antique,
In ruined grandeur memorably rude;—
(Memorials stern of many a deadly feud)
O'er all thy wilds, from Tweed's remotest verge
To where the Tyne rolls blithe to ocean's surge;
No son of thine, how rude soe'er his heart,
But feels it swell at all thou *wast* and *art*,
And owns his patriot spirit on the wing
With every lay his native minstrels sing!"

In his latter years he probably could not take care of himself, and took refuge in a workhouse. After reading his verses in 1860, I asked my friend, Mr. Robert White, of Newcastle, if he knew anything about his history, and he wrote of date December 5:—"From James Service I had a letter about a year ago, wishing me to assist him. He was then in the poorhouse at Sunderland, and sometimes attended in the shop of Mr. Garbutt—a bookseller there, who died some months ago. I called at the said shop once when I was at Sunderland, but could not see him as he was at the workhouse, which was nearly two miles distant. I think he told me he had a wooden leg, and he disliked exceedingly the confinement of the poorhouse. Very likely he is there still." This was nearly fourteen years ago. Of either praise or blame he must be reckless now. This is all I know of poor Service!

Obituary Notice of Thomas Young Greet.

IN Thomas Young Greet, the Club has lost an active and promising member, cut off in the prime of life. He was born at Brixton, Surrey, in December, 1833; and died at Birchhill, Norham, 29th April, 1873. At his first school, at Canterbury, he imbibed ideas of ecclesiastical antiquities; and he acquired a taste for botany from the lady with whom he boarded. Purposing to follow out the profession of land agent and surveyor, he was articled for five years to Messrs. Farebrother, Clark, and Lye, London. At the expiration of his articles in 1854, he learnt farming with Mr. Alexander Smith, of Galagate, for two years. Finding our Border climate suited his health better than the south, and enjoying the sport of angling in the Tweed, he resolved to settle down at Norham. In the autumn of 1858, and thereafter for eight months, he travelled on the Continent and in the island of Sicily, with his friend Capt. Hutchinson, R.A. On his return, he remained at Norham till July, 1860, when he went to Australia. He passed thirteen months in the colonies of Victoria and Adelaide—returning to England in February, 1862. He went to Morris Hall in 1865; and soon after was married to Miss Sarah Jane Laing, second daughter of the late Mr. John Laing, of Cornhill, now left a widow with four daughters. Two years ago, having previously bought the pleasantly situated small property of Birchhill, overlooking the village of Norham and the beautiful stretch of the Tweed from Ladykirk House to Norham Castle, he commenced building a villa, which he only lived to complete. He removed into it from Morris Hall in March, and was only once beyond the threshold.

In Australia, when staying at Guichenon Bay, Mr. Greet formed a collection of the different sea-weeds, shells, &c., on that coast, and made several water-colour sketches of Australian bush scenery. Whilst there he became very friendly with Father Woods, of Penola, a geologist and mineralogist, who has written a very important work on the geology and mineralogy of South Australia. Mr. Greet used to visit him up-country, mineralise with him, and make sketches to aid his work.

He commenced gathering coins and antiquities when a lad, and had a small excellent collection of English gold and silver coins, as well as articles of antiquity, such as celts, &c.

He had a taste for pictures, and was himself a fair draughtsman. He was a friend of Horatio Macculloch, who painted some pictures for him. He had also several good pictures by R. T. Ross, Sticks, Williams, and Train.

Mr. Greet was elected a member of the Club, October 28, 1857. He contributed to Vol. iv., p. 218 of the "Hist. of the Club," two plates of "Saxon Sculptured Stones at Norham"; and to Vol. v., p. 289, "Notes on Ancient Relics found in the neighbourhood of Norham," with a plate. There is also a notice of his, with figures, in the "Border Magazine," 1863, p. 245, "On Ancient Rings and a Bronze Pin, found near Norham."

On Hawick and its Neighbourhood.

GEOLOGY OF THE HAWICK DISTRICT. By *Professor James Elliot*, Goldielands.

THE geology of upper Teviotdale is very simple. Down the whole valley above Hawick, and to a distance of four miles below it, the rocks are all of the Silurian system; and further down the Devonian commences, that is the Old Red Sandstone. The following brief remarks are limited to the former, including only the district immediately around Hawick:—

The Silurian rocks are all stratified. The strata, which originally must have been deposited in nearly horizontal layers, have subsequently been turned on their edge, being now nearly vertical, dipping at Hawick to the south-east, and further north to the north-west, the great anticlinal axis passing about a mile to the N.W. of Hawick. On the Hawick side of that axis the strata have those, which were originally the upper surfaces, now facing the south-east, but on the other side of that axis the upper surfaces face the north-west. The strata immediately north of Hawick are probably the oldest in the south of Scotland. The numerous foldings of the strata, so remarkable on the coast of Berwickshire, do not appear to exist here, having been caused, there, by volcanic action probably confined to the locality.

The strike of the strata here, as in Berwickshire, is from north-east to south-west nearly, and that also without any great foldings, although often turned a little out of the general direction.

The summits of all our highest hills are of trap rock, leading, in combination with the appearance of some of them, to the idea that they have been centres of volcanic action; but a more probable theory is that *the whole district* has been at one time overlaid, to some height, with trap rock, which subsequently, by the action of glaciers and the inroads of the sea, has been all swept away, except in a few spots where superior compactness has preserved both the trap itself and the rock below it from denudation. The only argument against this is, that not a fragment of trap remains in the upper valley of the Teviot. On the top of Windburgh, and also on the Eildon Hills, the trap may be seen in vertical and very regular basaltic columns.

Besides these trap summits, there are some dykes of greenstone, the principal one of these extending across the whole island, in a direct but tacking course, and of a nearly uniform width, from Acklington, in Northumberland, to the mouth of the Clyde.

The district is entirely devoid of coal, and shows only the faintest traces of some of the commoner metals. Even the dyke just mentioned, which appears to be auriferous in its north-western course, shows no trace of gold here.

The present condition of the district is undoubtedly due to glacial action, but not demonstrably so, as in the Highlands; where we can measure the depth of every glacier. The surface of the rock here is so uniformly covered with soil, that grooved and polished surfaces are rarely visible. Our numerous scaurs, however, composed of boulder clay, are evidently deposits from glaciers, a great part of the stones washed out from them being polished and striated, on one surface at least. We have no ice-berg boulders.

Until lately the district was believed to be entirely devoid of organic fossils, of either animal or vegetable origin; a solitary specimen, supposed to be the footsteps of a crustacean, having been found by Professor Harkness, at the extreme limit of the district. But in 1869, I sent some good specimens to Sir R. Murchison, at his request, and subsequently exhibited some others to the Hawick Archaeological Society, and to the Geological Societies of Edinburgh

and London. Soon after my communications to the two first of these societies, Messrs. Wilson and Lapworth produced other specimens from the Silurian Rocks of Roxburghshire and Mid-Lothian, including a *Proto virgularia* from near Hawick and some graptolites from the upper valley of the Slitrig. Their other specimens were from the upper Silurian formations, in which graptolites and crustaceans are more abundant. Subsequently, Mr. Robert Michie found a good specimen also in the valley of the Slitrig, which Dr. Woodward, of the British Museum, has since described as a new species of crustacean. Next, Miss Jessie Watson picked up, in the quarry at Stirches, a well-marked impression of what appeared to me to be a plant resembling a fern, but has been set down by higher authorities as the footprints of a *Nereite*. Mr. Alexander Michie subsequently found the same impressions *in situ*, and sent a good specimen to the British Museum, which is now in their collection. He and myself have subsequently added many others, as yet nameless, to our collections: and these we will have pleasure in showing to those members of the Club who may take an interest in them. Only it must be understood that, although far more rare and interesting in a geological point of view, they have neither the beauty nor the distinctness of the fossils of the coal measures, which belong to a much later period. I regard them as almost entirely vegetable impressions, but it is the cumulative evidence of the whole which most clearly establishes that, not the appearance of any single specimen.

Mr. Robert Ewen has also deposited in our museum a very remarkable and unique fossil, found by his son in the greenstone dyke previously described. It is about a yard in length and several inches in diameter, cylindrical in its lower half and tapering above, the lower part of dolorite, the upper of porphyry. It has been described by certain geologists as a basaltic column, as if any basaltic pillar had been found, either single, or circular, or tapering. I regard it also as a petrified plant swept into the current of lava from the adjacent rock.

I have also, I may add, found in more than ten different places, well-marked examples of impressions made by showers of volcanic sand, sometimes in little hard grains, sometimes in a melted condition. A description of some of these, with various accompanying features, was read in a

communication of mine to the Royal Society of Edinburgh, by Mr. David Milne Home, as far back as the year 1849.

ANTIQUITIES OF THE PREHISTORIC PERIOD OF THE HAWICK DISTRICT. By *James Brydon, M.D.*

IN prehistoric remains our district is very rich; but the examples are more numerous than varied. "I only know two English neighbourhoods thoroughly," says the Old Boy in his description of Tom Brown's birth-place, "and in each within a circle of five miles there is enough of interest and beauty to last a reasonable man his life." Such a neighbourhood is that of Hawick to the archæologist. Within a limit of five miles there are more ancient remains than would occupy, in exploring them, the most assiduous antiquary, not one, but many life-times. As, consequently, this cannot be done in a flying visit such as the present, I shall not confine myself to Thomas Hughes' narrow limits. Our most noteworthy prehistoric antiquities are the Catrail, the Hawick Moat, the British Forts, the Sepulchral Tumuli, and the so-called Druidical Circles. It will be impossible for you to visit all of these, so I shall confine my notice to those most likely to come within the sphere of your observation.

The *Catrail* is a structure whose meaning, and even extent, is shrouded in mystery. Its very existence as one continued work has been doubted. While some aver that it commences at Galashiels and runs across the country to the head of North Tyne; others assert that it extends only from Roberton parish to the northern confines of Liddesdale—that it begins at Henwoodie and ends at Robert's Linn. Its course through the latter part is certainly much more distinctly marked than through the wider range. It consists of a broad ditch with lateral walls on each side. The average width of the ditch at the bottom is from four to five feet, and at the top of the walls, twelve to thirteen feet. The mounds vary much in height, but in many places they are four feet high. The walls are entirely made up of earth and stones, without any appearance of building, and the bottom of the ditch is the natural soil. But the most curious feature in connection with it is that, though it can

be traced from Henwoodie to Robert's Linn, it is not a continuous structure. Wherever it strikes a burn or rivulet it disappears, no matter how small the rivulet may be; and the extent of its absence almost equals that of its presence. It is only present across the hill tops, and imagined to be continued by the streamlets of the dales. It has been supposed to be a barrier between warlike tribes, a road by which the Romans passed to the north, and a march-dyke between peaceable neighbouring tribes; but there are peculiarities about its size and extent which render each of these explanations just as unlikely as the popular one, which is worth mentioning. The Devil dwelt in a cave in that wild moorland now occupied by Hellmuir Loch, and his mother was his housekeeper. One morning he awoke early, as he had a busy day before him; having to brand and dispose of a large number of apostates, whom he had caught the day before. Finding his porritch not ready, and his mother still sleeping, he flew into a passion, seized a huge stone and smashed her brains out; and in the ecstacy of his frenzy dragged her body across the country, till, becoming tired, he threw her into a deep pool in a burn on the farm of Stonedgie, which pool is called the Devil's Cauldron till this day. She was heavy, and her body ploughed up the land and made the Catrail. It can be best seen to the west of Penchrise Pen, across the Doecleuch Height, from the head of Teindside-burn to Broadlee Loch, and over Girnwood farm in the direction of Hoscoteshiel. The investigations which Mr. Robert Michie is now making will, however, probably shed some certain light upon it.

The Hawick Moat—

“The moat-hills mound—

Where Druid shades still flitted round,”—

when William of Deloraine made his memorable midnight journey to Melrose, is within the confines of the burgh. It is a conical hillock, with the following dimensions—Height, 30 feet; circumference at base, 312 feet; at top, 117 feet; cubical contents, 4060 yards. Like the Catrail, it has been the source of much speculation as to its nature. That it may have been, in comparatively recent times, used as a judgment seat, is not improbable; but that this was the purpose for which it was originally constructed is very unlikely. Indeed, there is every reason to believe that when it was used as such, if ever it was, it was then so old that

even the offspring of the people who had piled it up had all perished from the land, and their successors had lost from their memory all remembrance of their very existence. That it was originally of a sepulchral nature, most archæologists are now agreed. This view is strengthened by what has been discovered in the few similar remains which have been explored. Some years ago, when the town was making holiday in honour of a visit of royalty, a hole was dug on its summit for the purpose of erecting a flag-staff. At a depth of three feet a number of bones were turned up. Some of these were submitted to me for examination. They were those of the limbs of a dog. This is in accordance with what we find in other sepulchral mounds. Among the primitive inhabitants of our island, provision was made for the future state of existence; and as it was believed that this was to be very like a continuance of the present, the mighty departed were amply provided for the war trail and the chase on the plains of the spirit-land. It would be a great thing for the science of archæology if the Moat could be explored, and I have no doubt that no one would be better pleased to see this accomplished than its proprietor, the Duke of Buccleugh.

The *forts* or *camps* are the most prominent archæological feature in the district of Upper Teviotdale. Indeed, so prominent are they, that there is not a hill with any character which is not surmounted by one; and many of them are found on low grounds, and by the sides of streams and marshes. Among the inhabitants of the place they are generally accredited to the Romans; but this is only a "vulgar error"; we have not a single Roman camp. They are all British; but to what period in the history of our country they have to be ascribed is a difficult matter to determine. From Ruberslaw to the Wisp on the east and west, and from Caldeleugh to Leap Hill on the south and north, we include a district in which there are at least fifty of these ancient remains. They are not, by any means, equally distributed over this area. In some places, such as those wild moorlands near the watershed of the Teviot and the Esk, and in the cultivated lands near the eastern boundary of the territory indicated, they are comparatively rare; but all along the line of the Catrail they are very numerous. Indeed, so much is this the case, that many who have given

their attention to the matter have supposed that the connection is something more than accidental.

They principally consist of earthworks—a piece of land enclosed by a ditch or ditches, and an earthen wall or walls. Around some of them, however, the barriers have been principally constructed of stones. In most of them, the enclosed area shows depressions and elevations, which no doubt represent what were once the dwellings of the occupiers of the forts. No better example of this can be mentioned than that on Kirkton farm, four miles to the south of this. Some of them are within two miles of Hawick, but they are not good specimens; and as most likely the route I have proposed will be adopted, it is unnecessary to mention them.

They vary in extent from half an acre to five or six acres. The depth of the ditches varies from two to twenty feet. One curious thing in connection with these ditches is, that they are deepest towards the north. From their characters there is no doubt that they belong to very different periods; but into this question it would be out of place to enter now. It will be sufficient to state that they may be divided into two great groups—those which are pre-Roman, and those which are post-Roman. The former occupy the highest summits of the hills, and consist of fortified hill-tops, about which there has been no design except to make the most of what nature had already provided. The great object of these primitive camp-builders was safety; and nature before art was asserted. Consequently they have no common form or mode of structure. With the others it is different; they have all the same outline, and the same method of fortification. Why they should have been circular instead of square, as the Roman camps are said always to have been, it is difficult to explain; but that they were constructed after the Roman type is evident, for many reasons. In the route proposed, there are several excellent specimens of these forts, which will be pointed out. I shall only mention those of Southfield, Dodburn, Whitehillbrae, Brughhill, Priestthaugh, Doeceleugh, Colterscleugh, Teindside, and Chapelhill. The last is especially worthy of notice, as it is not one fort, but a cluster of them; is, in fact, probably the ruins of Gadenica, the ancient capital of the Gadeni. Enclosed by a ditch and flanking walls, there are six separate encampments. They

are arranged in three rows ; from north to south first three, then one, and then two. Those of the north and middle rows are on a higher level than those on the south, and are separated from them by a steep brae. Two of the north set, the middle one, and one of the south row are circular ; the other two are quadrangular. They are all surrounded more or less by a ditch and rampart, except the middle one of the north and that constituting the middle row. These latter are only surrounded by a wall. The westmost of the north row occupies the highest summit of the hill, is the largest, and has the highest ramparts and the deepest ditch. Outside the surrounding barrier there are several other earthworks ; the most noteworthy of which is an offshoot of this barrier away to the south-east.

There are camps in other places which are not single, such as those near the road-side on the farm of Priesthaugh ; but nowhere else do we find another group of equal magnitude to that of Chapelhill. There is also some variety in their defences. Those of Courthill and Southfield show a considerable amount of military engineering. It is not very much to the credit of archæologists that no one of these forts has ever been excavated and thoroughly explored. However, Mr. Govenlock, of Teindside, is in a fair way to remove this slur.

The known *sepulchral tumuli* in the district which have not been rifled are few in number. In the uplands of Hobkirk parish there are several ; there is one on the farm of Southfield, one at Commonsidge Cottage, and another on the farm of Midshiels. There are two so-called *Druidical circles* in the district, at Stonedge and Priesthaugh. The latter lies in the proposed route ; and, in connection with it, I may state that it has been well explored, but yielded nothing of a sepulchral nature.

ANTIQUITIES OF THE HISTORIC PERIOD. By *Mr. Robert Murray.*

ALTHOUGH our heroic traditions run back into "fable-shaded eras," and some of our ceremonies bear the impress of Druidical worship, the dwellings in which our fathers lived and the written records of their sayings and doings

have perished in the flames of strife and war. Hawick appears to have been an important town in the twelfth century ; and in a map of the thirteenth century, published in the National MSS. of Scotland, it is one of the sixteen towns shown as existing at that date, in addition to those which were the sites of castles or abbeys. The Tower Hotel, in which we are met, is composed of a cluster of buildings, the oldest portion of which is the remains of a feudal stronghold, which was occupied by the chieftain of Hawick many centuries ago. It was the only house saved from fire when the inhabitants themselves burnt the town on the approach of Sussex in 1570 ; and in it the English general resided during the night. After that it became the favourite residence of Buccleugh. Anne, the royal widow of the ill-fated Duke of Monmouth, resided there in all her royal dignity. One of the apartments yet bears her honoured name. The Tower in those days was strongly built arch upon arch up to its very summit. All the arches except the under one were taken down a century ago, and it was transformed into an inn, and continues yet in the lordship of Buccleugh.

There are other four houses in our town which link us to feudal times. The under flats are vaulted, and the walls are of great thickness. This sort of houses was more numerous a few years ago, but the spirit of the times has removed them for the sake of the ground on which they stood. Of those remaining, two are in the Mid Row, one in the Fore Row, and one in the High Street. Access to them all can be had to-day.

In ecclesiastical buildings we have none of ancient date. St. Mary's, which surmounts the summit of the kirkyard, occupies the site of one at whose high altar Gavin Douglas officiated as rector, and which existed as far back as 1214. Sculptured stones of the ancient church are preserved in our museum, and are excellent specimens of the carving of those by-gone centuries.

There are a few old towers around the town. That of Burnhead, about two miles to the north, in the parish of Wilton, is a good specimen, and has an imposing effect when looked at from the glen below. That of Goldielands, owing to its high situation, is well seen for many miles around, and a genuine old tower it is. Our museum contains a few armorial and memorial stones which record the character

and kin of the Scotts of Goldielands. The tower is two miles up the Teviot. A short distance below Goldielands the site of Crumhaugh Tower can yet be traced. The knights of Crumhaugh were also kinsmen of the "Bold Buccleugh." There is a stronghold of the Scotts at Allanhaugh, further up the water, but it is in a very ruinous condition. Branhholm Castle is now a combination of the ancient and modern styles of architecture. It is situated on the north bank of the Teviot, three miles above Hawick. The tower on the western flank, the vaulted cells in the under flat, and the remnants of masonry around it, are indications of its ancient greatness. Branhholm has belonged to the house of Buccleugh since the reign of James the First, and was long the chief residence of the family. Sir Walter Scott, chief of the clan in the days of Queen Mary, could command the service of three thousand men in his own locality.

The towers of Branhholm may moulder away stone by stone, or yield to utilitarian taste, but they are embalmed by the "Lay of the Last Minstrel"; the stanzas of which will continue as household words as long as literature endures.

Harden Castle, a heritage of Lord Polwarth, is altered into a modern residence, but it still retains its ancient outline as a fortress of feudal days. It is about four miles to the west, and is near the Borthwick water. It stands on a high and wooded terrace overlooking the deep, dark glen, where Wat of old secured his booty. The structure is adorned with a few sculptured stones, and such like traces of its former lairds. But the chief charm of Harden is owing to the fame of Wat and his wife, Mary Scott, the Flower of Yarrow. Wat, like his namesake and kinsman of Branhholm, lived in the time of Queen Mary, but of his death nothing is known; and there is no record even of his grave. He seems, however, to have lived to an old age, as he is generally spoken of as Auld Wat o' Harden. His feuds and forays are familiar to all, and a portrait of him is preserved in the ballad of "Jamie Telfer."

Cavers House is easterly, and three miles from Hawick. Its architecture is the representative of many ages. As early as the twelfth century it was the residence of the Norman family of Baliol, who afterwards attained the crown of Scotland. A branch of the Douglas clan has been

lairds of Cavers upwards of five hundred years. In Cavers House can yet be seen the Douglas banner which waved at Otterburn, and the trophy of gauntlets gained from Percy under the walls of Newcastle. Cavers Kirk is also an ancient building, and has many associations, both classic and clerical.

Stirches House has been for centuries the residence of the Chisholms—a family who can trace their ancestry back to the Norman conquest.

A thorn tree at Wilton Lodge has retained to our day the tradition of Wallace having tied his horse to it when on a visit to Langlands of Langlands.

TRADE AND MANUFACTURES OF HAWICK. By *Mr. David Watson**.

DESPITE their predatory habits and traditions, the inhabitants of Hawick seem to have engaged in mercantile pursuits at a pretty early period. In 1362, William de Hawyk, merchant, having two companions and three horses, received safe conduct to go to England for trading purposes: and again in 1386 and 1369. Our local records previous to 1640 have unfortunately been destroyed, but the earliest entries shew that at this date the weavers of Hawick were a numerous and influential corporate body. The hosiery trade with which the name of the town has become intimately associated, was commenced here in 1771 by Mr. John Hardie. Inkle, or tape weaving, and the manufacture of carpets flourished for a short time, but ultimately dwindled away, leaving the hosiery branch still vigorous and prospering; and it remained without a rival till 1817, when blankets, and ultimately tweels, or tweeds, as they were subsequently named, gradually became the staple manufacture, and that in which the advance has been most marked.

* For an interesting and exhaustive article by Mr. Watson on this subject see "Transactions of Hawick Archaeological Society."

On the Nunnery of North Berwick. By JOHN STUART, LL.D., Secretary to the Society of Antiquaries of Scotland.

LITTLE or nothing now remains to witness the existence of this religious house, which in its day was one of considerable importance. The manor of North Berwick belonged to the Earls of Fife; and the founder of the Nunnery is believed to have been Duncan, Earl of Fife, who flourished in the time of David I., and died 1154. A charter still remains of his son, Earl Duncan, dated about 1177, whereby he confirmed to the nuns of North Berwick the land called Gillecarnston, on which the Nunnery was built, with other lands. He also granted to them the hospitals, one at the south side of the ferry, and the other at the north side, which his father had founded for the reception of the poor and of pilgrims. The hospital thus granted on the south shore was at North Berwick, and that on the opposite coast was at Ardross. By the same charter he granted to the nuns the tithes of his house and larder: the latter including the tenth cow, the tenth ram, the tenth pig, the tenth hen, the tenth goose, the tenth lamb, and the tenth of the whole cost of the kitchen as well in flesh as fish, and the tenth skin of all his sheep which died, and the tenth of his wool and his lambs. The house was also endowed with other lands and churches in various parts of the country; its revenues at the Reformation being stated at £556 17s. 8d. of money (Scots); 9 chalders 12 bolls wheat; 19 chalders 4 bolls of bear; 14 chalders 4 bolls oats; 3 chalders 9 bolls pease and beans; 1 boll 3 firlots 3 pecks malt, 18 oxen, 13 cows; one last 9 barrels salmon.

The position of the Nunnery exposed it to many of the evils which resulted from the wars between England and Scotland. In 1296, the prioress of North Berwick and the guardian of the Monastery took the oath of allegiance to Edward I. In 1482 we find that the prioress had appealed to Parliament for protection against John Dischington and other inhabitants of Fife, against attacks on her property. In March, 1549, the prioress was repledged from the King's Court by the official of the Archbishop of St. Andrews, to answer the law for the waylaying and invasion of Alexander Oliphant of Kelly, for his slaughter, and for other crimes of oppression committed against him and Alexander Gourlay of Kincaig. Alexander Hume, of North Berwick, became

surety for her appearance at the court of the official within the Collegiate Church of St. Giles, on the 30th April following. At the same time, the above Alexander Oliphant of Kelly, and others, were accused of the forethought felony, hamesucken, and oppression done to Margaret, prioress of North Berwick, and her servants, amongst her lands of Grange, lying within the shire of Fife, besetting the way to the said Prioress and her servants for their slaughter, and besieging them within the mansion house of the said lands. The issue of the trial does not appear in the Records of Justiciary where the above notice occurs.

In the early part of the sixteenth century, Alison Home was prioress. In 1523, she granted in lease to Alexander Home, of Polwart, and Patrick Home, his son and apparent heir, the teinds of the Kirk of Logy. In 1524, we find Alison Hume, within the chapel of St. John the Baptist, in the church of the Monastery, resigning the priory in favour of Isabel Hume, a nun of Eccles. In 1539, "Dame Isobell Hoym," along with seventeen nuns, consented to a charter by William Fowler, chaplain of the altar of the Holy Rood, of certain crofts on North Berwick; but it would appear as if none of them could write, as the deed is signed by a notary, the ladies' subscriptions being made by him, and they touching his pen. On 12th August, 1544, while Isabella was still styled prioress, Dame Margaret Hume, a sister of Patrick Hume, of Polwarth, was postulate or prioress elect; and they both joined in a charter of the two mills of North Berwick, along with twenty nuns of the house, "with all our hands laid at the pen." On 30th March, 1562, Dame Margaret was "sick and evil at ease," and on the 20th April she was dead: but, although the property of the Monastery had been mostly dilapidated under her charge, the Convent continued to linger on under the government of another lady of the family of the same name; and this prioress subscribed her own name, "Dame Margret Hoom," to a lease dated in July, 1580, while the two nuns concurring, "Dam Isobell Rentoun," and "Dam Margaret Donaldsonn," touched the pen and their names were set down by a notary. In the year 1595, the latter was the only nun of the Convent remaining alive; and in 1596, she concurred with the prioress in the last acts for the dissolution of the Monastery. At this time the prioress began her deed of resignation of the Kirk of Logie into the hands of the king, by a narrative that

“the monastical superstitions for the quhilk the abbaceis and nunreis of this realme were erectit of auld, are now be the laws of this realm alluterlie suppressit and abolischit.”

In 1529, the Archbishop of St. Andrews lamented in a writ addressed to the Pope, the frequent devastations by war of the Monastery of North Berwick and its lands, and the burning of its church by the invading enemy. Whether the Abbey Church was afterwards rebuilt is now unknown; no vestige of it, however, remains.

The ruins now known as the Abbey of North Berwick still show enough to leave no doubt that they are of later structure, apparently about the time of the Reformation, when the Humes, lords of North Berwick, may have erected a building on the site of the old Nunnery. There is no mark of any ecclesiastical building in the existing ruins.

A few imperfect tombstones, a fragment of an old font, and a few other relics have been preserved and placed in the garden of the adjoining farm—the Abbey farm of North Berwick. To the eastward of the ruins many rude stone coffins have been turned up, and some of the paving tiles of the church have been occasionally found, highly glazed, and with ornamental patterns in relief.

On a little promontory which defends the harbour of North Berwick, on the west, are the remains of a vaulted building, which may be the remains of the hospital at the south side of the ferry, given by Earl Duncan, of Fife, to the nuns. There has been probably a chapel and cemetery attached to it, and it has been said that the soil of the promontory is full of human bones.

These scanty details of the Monastery have been gleaned from the Register of its Charters, printed for the Bannatyne Club, and from the preface of Mr. Innes, its learned editor.

It may be mentioned that North Berwick holds a prominent place in some of the trials for witchcraft which disgraced the reign of James VI., and specially in connection with a great “convention” of witches with the devil, which was held in the kirk of North Berwick, towards the end of the year 1590. The details are given in Pitcairn’s “Criminal Trials” (Vol. i., p. 240), and Sir James Melville has preserved the following account of the transaction in his “Memoirs”:

“About this tym many witches wer tane in Lowdien, wha deponit of some [] maid be the Erle Bodowell, as they allegit against his Majesteis persone. Quhilk commying to the

said erlis eares, he entred in ward within the castell of Edenbrough, desyring to be tryed, alleging that the deuell, wha was a lyer from the begynning, nor yet his sworn witches, aucht not to be credited. Specially ane renowned midwyf, callit Anny Sampson, affirmed that she in company with nyn uthers witches, being convent in the nycht beside Prestounpannes, the deuell ther maister being present standing in the midis of them; ther a body of wax, schaipen and maid be the said Anny Sampson wrappit within a lynning claith, was first delyverit to the deuell; quhilk efter he had pronouncit his verde, delyverit the said pictour to Anny Sampson, and sche to hir nyxt marrow, and ea every ane round about, saying this is K. James the Sext, ordonit to be consumit at the instance of a noble man Francis Erle Bothwell. Efterwart again at ther meeting be nycht in the kirk of Northberick, wher the deuell, cled in a blak gown with a blak hat upon his head, preachit unto a gret number of them out of the pulpit, having lyk leicht candles rond about him. The effect of his langage was till knaw what skaith they had done, whow many they had won to their opinion sen ther last meeting; what success the melting of the pictour had tane, and sic vain toyes. And because ane auld felz pure plowman callit Grey Meill chancit to say that 'nathing ailit the king yet, God be thankit,' the deuell gaif him a gret blaw. Then dyvers among them enterit into a raisonyng marvelling that all their deuellerie culd do na harm to the K. as it did till others dyvers. The deuell answerit 'Il est un home de Dieu.' And certainly he is a man of God, and dois na wrang wittingly, but is inclined to all godlynes, justice, and vertu, therefore God hes preserved him in the midis of many dangers. Now efter the deuell had endit his admonitions he cam down out of the pulpit, and caused all the company to com and kiss his ers, quhilk they said was cauld lyk yce; his body was hard lyk yrn, as they thocht that handled him: his faice was terrible, his noise lyk the bek of an eagle, gret bournying eyn: his handis and legis wer herry, with clawes upon his handis, and feit lyk the griffon, and spak with a how voice." (p. 395.)

Notices of the Early Ecclesiastical History of East Lothian and the Bass, and of Caves as the retreats of the Early Saints. By JOHN STUART, LL.D., Secretary to the Society of Antiquaries of Scotland.

THE missionaries by whom the glad tidings of the Gospel were proclaimed to the rude tribes of the north were led to select for their early settlements such spots as combined the advantages of seclusion with safety. It was thus that in the history of the infant church, we find its monastic bodies nursed sometimes within the walls of a Saxon palace, as at Canterbury, or the palisades of an Irish rath, as at Derry and Armagh, while at other times they betook themselves to solitary islands and gloomy caves. The sentiment which impelled the illustrious Columba to select for his monastery the storm beaten island of Iona, around which there linger so many imperishable memories, was reproduced in the choice of Lindisfarne for a like purpose by the holy Columbite Aidan, when he was sent forth from the solitude of Iona at the request of the Northumbrian king. The monastic ruins on the Isles of Aran, Tory, and Irishmurray on the Irish coast, as well as those on the Welsh islands of Bardsey and Ramsey, are evidences of the diffusion of the feeling referred to. We are thus prepared to find that the Bass and other islands in the Firth of Forth were selected as the retreats of early colonies of monks and hermits. Of these the Isle of May in the mouth of the Firth was the seat of a monastic establishment of St. Adrian, who at first laboured as a missionary among the southern Picts of Fife, but having, like St. Cuthbert, come to desire a place of greater retirement and more uninterrupted devotion, he retreated to the adjacent "May." Here, with his "company," he received the crown of martyrdom at the hands of the Danes, about the time that the first establishments at Iona and Lindisfarne were consumed in the fires kindled by the same pagan bands. In the words of our old chronicler, Wyntown—

"Apon haly Thursday
Saynt Adriane thai slwe in May,
With mony of hys cumpany
Into that haly Isle thai ly."

(B., vi., c. viii.)

At an early period Inchcolm afforded an asylum to one of an order of hermits, of whom there were many represen-

tatives in the youthful church of Alba, and by whom, according to the witness of Turgot, the Christian spirit was maintained towards the end of the Celtic period, when the monastic bodies of the country had become corrupted and secularized.

The great apostle of East Lothian was St. Baldred, or Balther, who is said to have died in the early part of the seventh century. He had a cell at Tynningham, a site where in later times a monastery was raised, which, as we are told by Symeon of Durham, had a territory stretching from the Lamermore to the mouth of the Esk. ("Hist. de Sancto Cuthberto.") We learn, however, from the legend of St. Baldred, in the "Breviary of Aberdeen," that one of his chief places of resort was the Bass Rock, where he for a long time dwelt, occupied, like his reputed master St. Kentigern, in fasting and devout meditation on the Passion of Christ. In the district of Lothian where he laboured, there are three churches which are specially associated with his memory: those of Aldham, Tynningham, and Preston. On the death of the venerable man, each of the churches desired to have his body for interment, and when the people could not come to an understanding, they were advised to pray to God to give a sign of his will. On the following morning, they found three bodies laid out for burial, and each congregation carried off one to its own church, where (as the "Breviary" asserts), it was kept in great honour thereafter, and down to its date, which was the beginning of the sixteenth century.

At an early period we find St. Baldred's Church at Tynningham distinguished as a place of sanctuary. King Malcolm IV. granted to the monks of Kelso the church of Inverleithan, with the like privilege of sanctuary as that enjoyed by the churches of Tynningham and Stow; and we learn from the "Chronicle of Mailros," that the church of St. Balther and the village of Tynningham fell under the desolating hand of the Danish Anlaf, in the year 941. The saint's memory is kept up by the association of his name with various localities in the district. In the neighbourhood of the church of Preston there is a fine spring which is called "St. Baldred's Well." A pool in the Tyne is known as "St. Baldred's Whirl"; and on the coast a bason formed in a rock by the sea is called "St. Baldred's Cradle." In the churchyard of Preston, St. Baldred's statue remained till towards the end of the last century, when it was destroyed.

The connexion of St. Baldred with the Bass is commemorated by the learned Alcuin in his poem, "*De Sanctis Ecclesiæ Eboracensis*," under the head "*Baltheri Anachoretæ res gestæ*," where the place is thus described:—

"*Est locus undoso circumdatus undique ponto
Rupibus horrendis prærupto et margine septico.*"

(*Gale Scriptores*, xx., p. 726.)

One of the miracles recorded in the poem would seem to have happened at the Bass, for—

"*Gradiens nam tempore quodam
Rupis in excelsæ prærupto margine, casu,
Contigit ut caderet; sed fluctibus illo marinis
Suffultus, graditur siccis super æquora plantis.*"

(*Idem*, p. 727.)

An original instrument in the General Register House, Edinburgh, seems to fix the date of the church of which the ruins are yet to be seen on the Bass. It is a commission by Pope Alexander VI. to the Prior and Archdeacon of St. Andrews, to investigate a claim by the prioress of North Berwick against Robert Lauder of the Bass, and rector of the parish of the Bass, for certain barrels of grease of geese, dated 10th May, 1493, in which it is set forth that the church had then been recently erected—"noviter erecta." It does not appear to have been consecrated till 5th June, 1542, when it is recorded that, "M. Villiem Gybsone, byschop of Libariensis and suffraganeus to David Beaton, Cardynall and Archebyschop of Santandros, consecrat and dedicat the Paris Kirk in the Craig of the Bass, in honor of Sant Baldred, Bysschop and Confessor, in presence of Maister Jhon Lawder, Arsdene of Teuidaill, noter publict." ("*Extracta ex Cronicis Scocie*," p. 255.)

I have referred to the use of caves as well as islands as the retreats of our early saints. This was common both to the Celtic and Saxon churches, and the custom may have been in part derived from that of St. Martin of Tours, whose influence in many ecclesiastical arrangements was diffused from his little cell at Marmoutier throughout western Christendom. The great saint of Northumbria, besides his islet of the Farne, had another place of seclusion, described by Venerable Bede, which may probably be identified with the cave near Howburn, which has always been known as "St. Cuthbert's Cave," or "Cuddy's Cove"; as has also

another small cave at Dodlaw, near Wooler. A cave in the cliffs at Auldham has been associated with St. Baldred in popular belief. St. Ninian had his cave in the face of a lofty rock on the shores of Galloway. St. Kieran's cave, near Campbelton, still contains his well, and has a rude cross cut on the wall. St. Columba had a cave at Lochcaolisport, in which an altar and font, with a cross incised on the rock, yet remain to attest its religious use. The biographer of St. Kentigern informs us that it was a custom of the saint during the time of Lent to retire to his cave, in order that, being free from the tumults of the world and the strife of tongues, he might hide himself in the presence of God. St. Serf, the great apostle of Fife, had a cave at Dysart, and here, as we read in the "Breviary of Aberdeen," he was on one occasion assaulted by the devil while in retreat, and challenged to a theological discussion. The legend appears also in the pages of Wyntown, who says—

"Quhil Saynt Serfe intil a stede
Laye aftyre Matynis in his bede
The Devil come, in full intent
For till fand him wytth argument."
(*Cronykil*, B. v., c. xii.)

The details of the encounter are given with great minuteness; and among the questions with which the saint was posed were these: "Where was Adam after he was put out of Paradise?" "How long was he in Paradise after his sin?" "Where was Eve made?" "Why did God allow Adam and Eve to sin in Paradise?" At last the devil confessed that he was vanquished, when he said to the saint—

"He kend him for a wys man
For-thi he thare gave him qwyte,
For he wan at hym na profyite."

To which St. Serf replied—

"Thou wrech ga
Fra this stede and noy nã má
Into this stede, I byd the."

The devil departed, and was never again seen in that place; which, as we read in the "Breviary," continued ever after to be held in reverence as connected with St. Serf. St. Monan had his cave at Invery, a place, which came in later times to be known, as it still is called, St. Monan's. Of this saint, who is said by Wyntown to have been a follower of St. Adrian, we read in that writer's "Chronicle"—

“At Invery, Saynet Monane
That of that cumpany was ane
Chesyd hym sa nere the se
Til lede hys lyf: there endyt he.”

(*B.*, vi, c. xiii.)

The “Ocean Cave” of St. Rule at St. Andrews has been sung by the great minstrel of our land; but it is only in recent days (and mostly through the research of the late lamented Sir James Simpson), that several groups of such caves on the coast of Fife have been also identified as the retreats of religious men. These occur at East Wemyss, a few miles east from Dysart, at Caiplic, and at Fifeness. They are of great interest, and would amply repay a visit of the Society if it should extend its sphere occasionally beyond the limits of Bernicia. Many of them have crosses cut on their rocky walls, along with (in some cases) the mysterious “symbols” which are peculiar to the sculptured monuments of Pictland.

The later history of the Bass is mainly concerned with it as a fortress and a prison. But as it has been often told, I do not here enter on it.

Excerpts from the Books of John, Duke of Lauderdale, respecting the Price of Solan Geese, from 1674 to 1678.
Communicated by ROBERT ROMANES.

THE BASS.—John Earl, afterwards Duke, of Lauderdale, was
in 1671, March 3rd, Captain of the Bass;
„ Aug. 21st, Keeper of the Bass; and
„ Sept. 7th, Governor of the Bass.

1674. “By pryce of Sollen-Geese of the Bass, 1674. The accomptant charges himself with the pryce of 1118 Sollen-Geese, sold for 11*l.* 8*s.* 4*d.* each score, p. contract accordinglie, dated 10 June, 1674, £79 3*s.* 10*d.* sterling.”
“To the climber of the Bass in full of his fee, waige, and allowance for the year and season 1674, and for some other small necessaries and charges that year, p. discharge upon the back of the contract accordinglie, £11 12*s.* 2*d.* sterling.”

1675. "By pryce of 1060 Sollen-Geese, as the product of the Bass the season 1675, sold for 11b. 9s. 2d. sterling each score, p. contract accordinglie, dated 11th May, 1675, £77 5s. 10d."

"To Charles Maitland in the Bass for his expense when he went to London with Sollen-Geese, p. his Grs. Order and his Receipt, dated 19 October, 1675, £20 0s. 0d."

1676. "By pryce of 1150 Sollen Geese as the product of the Bass for 1676, sold as above, p. contract 24 May, 1676, £83 17s. 1d."

1677. "By pryce of 985 Sollen-Geese, sold at 11b. 9s. 2d. each score, for the season 1677, p. contract accordinglie, £71 16s. 5½d."

1678. "For the Sollen-Geese in the Bass for year and season 1678, Charles Maitland is settled with, and here is the agreement made with him theranent.

'At Edinburgh, the 10th day of May, 1678, it is agreed upon and consented to betwixt Sr. William Sharp of Stonyhill on the ane part*, and Charles Maitland, son to Robert Maitland keeper of the Bass, on the other part, That is to say the said Sr. William Sharp setts and letts to the said Charles Maitland the whole Sollen-Geese of the Bass for the season 1678, for the sum of three score fifteen pounds sterl., to be payed to the said Sr. William Sharp, his heires, and exrs. free of all charges whatsomever incumbant to the delivery of the said Sollen-Geese, and the said Charles Maitland binds him and his heires and exers. to content and pay to the said Sr. William Sharp and his foresaids, the said sum of seventy-fve pound sterling, the one half at the date of thir presents and the other half upon the twenty nynth day of September next to come in this instant year 1678, with the sum of ane hundred pounds Scots of failzie, to be payed by the partie failziear to the partie willing to observe the premises. In witness yrof both parties have subscribed thir presents with their hands tyme and place aforesaid before these witnesses, John

* The Duke had granted a "Great Tack" of nearly all his property to Sir William Sharp.

Robertson, writer in Edr., and David Callender, writer hereof.

‘Charles Maitland is also to give to me in this season two dosen good Sollen-Geese free.’”

[The Rent of the Basse, 1764 to 1767, is given in Walker’s “Essays on Natural History,” p. 287, Edin., 1808, as follows:—

Rent to Sir Hew Dalrymple, Bart., the proprietor, 840 merks, or.....	£46	13	4
To the climber, 100 merks, or	5	11	1½
To seven men employed in catching the fowls, £16 Scots each, or	9	6	8
To the carrier 36 times to Edinburgh, 2s. sterling each time	3	12	0
Total.....	£65	3	1½

PRODUCE OF THE BASS.

They take the Solan Geese 36 times in the season, and at a medium 36 each time; which, at 1s. 8d. sterling each, is.....	£118	0	0
Sheep’s grass	5	0	0
Ten Scots gallons of oil, drawn from the fat of the fowls, at 8d. sterling each pint	2	13	5
Ten stone weight of feathers, at 10s. sterling per stone	5	0	0
Total.....	£130	13	5]

On the History of some Bass Plants. By JAMES HARDY.

1. LAVATERA ARBOREA, L. *Tree-Mallow.*

The key to the specific name of this plant is to be obtained in Theophrastus, who, speaking of the diversities produced by cultivation upon plants, instances the mallow, which becomes so rapidly arborescent, that in six or seven months it increases to the length and stoutness of a lance, and might suffice for a staff*. Hence the Greek name, Dendromalache, tree-mallow; in Galen, Anadendromalache. It then passes to Pliny. “For some writers doe report,” says he, “that in Arabia there be a kind of mallowes, which after

* Theophrasti, “Hist. Plant.,” lib. i., cap. v. (J. B. a Stapel), p. 10. Amsterodami, 1664.

they have growne six or seven months, come to be in the nature of pretie trees; insomuch, as their stalkes streight-waies serve in stead of walking staves.* Fee refers this to our *Lavatera arborea*.

Cæsalpinus commemorates a *Malva arborescens*, or Den-dromalache; and in the "Hortus" of Camerarius (Franco-furti, 1588, p. 95), we have it with this name. He found it plenteously near Pisa, but during winter it did not stand the open air in Germany. "Hyeme apud nos in loco idoneo recondi debet." In the appendix to Gesner's "Horti Germaniæ" (Tiguri, 1561, p. 293), it first acquired the form in which it is familiar to us of *Malva arborea*. He saw it first at Strasburg, in the garden of Herlin. It perished in the open air in the first frosts. There is mention of it in most of the great works upon botany in that age: Matthi-olus, Dodonæus, Dalechampius, Pena, J. and C. Bauhin; sometimes as a constituent in monkish gardens, or nursed in those of the curious. Dalechamp† testifies that it was grown in the gardens of Flanders, England, and Germany. J. Bauhin‡ saw it in those at Esling, Montpellier, Geneva, Basle, and Mumpelgard. Pena§ noticed it as attaining great bulk in the garden of the convent of the Holy Spirit near Venice. Hence, I think, C. Bauhin borrowed his "*Malva arborea Veneta dicta parvo flore*,"|| by which it was long known. It was on Bauhin's plant that Linnæus founded the *Lavatera arborea*, and not our dwarfer sea-side form. Gerard was ignorant of this plant, but not his editor, John-son; and it is described in Parkinson. Sibbald¶ met with it "in Inch Garvy and Myrkie-Inch, in the Firth of Forth"; where, in recent times, Professor Balfour has sought for it in vain. Ray was the first to record it for the Bass. Might not some of the old anchorites introduce the tree-mallow to some of its island sites, as memorials of lands afar off, or carried with them from some garden on the mainland,—a form of beauty still cherished amidst a condition verging on that of savage?

Lavatera, writes Philip Miller ("Gard. Dict."), "takes its name of the physician Helveticus Lavaterus, the friend of Mons. Tournefort; upon which account Tournefort so intituled

* Holland's "Plinie," ii., p. 13. London, 1601.

† "Hist. Gen. des Plantes," i., p. 496. Lyon, 1653.

‡ "Hist. Plantarum," ii., p. 954. Ebroduni, 1651.

§ "Stirp. Advers.," p. 233.

|| "Pinax," p. 315. Basileæ, 1623.

¶ "Scotia Illust.," p. 37.

it." Tournefort established the genus in the "*Acta Regiæ Scientiarum Academiæ*, 1706." In his life (p. v.) prefixed to the "*Institutiones*," I find with those who aided him in his researches, among the Swiss ("*Helveticos*," not a personal name as P. Miller made it), special reference to "*Lavaterus, medicus et chirurgus experientissimus*"; a skilful man no doubt. Sir W. J. Hooker says the genus was named after the *two* Lavaters; and Don ("*Gard. Dict.*"), adds, they were of Zurich, and both naturalists. Whether he is correct in saying they were "*Arcades ambo*," I shall not decide so long as there is a possibility of their unification. John Ray, in his "*Historia Plant.*," i., p. 601, quotes some passages from Simon Paulli, an old Danish botanist, to the effect that this herb is beneficial for sore throats and diseased gums—what we would now call an anti-scorbutic.

2. BETA MARITIMA. *Sea-Beet*

was first distinguished as a species by L'Obel, in his "*Observationes*," 1576, p. 126, as "*Beta sylvestris spontanea marina*." Its history is altogether barren, except that it has a sea-side flavour—"gustu salso et nitroso." It was an observation of Theophrastus, very long ago (lib. i., cap. v.), that there was a wild beet, which cultivation could enlarge till it became a vegetable dainty. Our sea-beet has undergone too deep a "sea-change" to be capable of amelioration.

3. CRAMBE MARITIMA. *Sea-Kale*.

Boethius* states that in the Bass: "*Nascitur etiam in hoc scopulo herba quædam humano esui suavis; cæterum si exportetur transplanteturque, nec esui apta est, nec aliube usquam potest*"; thus rendered by Bellenden, "*In this crag grows ane rycht delicious herbe and quhen it is transportit or plantit in any ither part it is of little sapor or gust.*" We will not be far wrong in identifying this with the *C. maritima* which grew on the Bass in Dr. Walker's time, who says, "*The leaves being large, tender, and succulent, we caused to be dressed a dish of them, and agreed in thinking them preferable to any other greens we had ever tasted. Our worthy friend Dr. Wright, not long before his death, sent for a large quantity of this plant, which he cultivated in his garden at Carsie; but how it succeeded upon being transplanted, I have not been informed.*"†

Either Dr. Wright, or else the rabbits, have eaten the whole of it, for it is now extirpated.

* "*Scotorum Historiæ*," Parisiis, 1575, p. 6.

† Walker's "*Essays on Natural History*," p. 296.

On Chirnside Parish: the Estate of Edington. By the late GEORGE HENDERSON, Surgeon, Chirnside; supplemented by JAMES HARDY.

[The late Mr. Henderson furnished to the iii Vol., p. 184, of the Club's "History," an account of "Chirnside, its Church and Churchyard." By a reference to his MSS., it is found that he has written the history of the entire parish, as well as of some other parishes in Berwickshire. The present article contains the portion which relates to Edington, one of the localities in the parish visited by the Club in August, and I have inserted other details from some researches in the same direction. Mr. Charles Watson has kindly sent a synopsis of the family descent, and the transferences of property, from materials in his possession. The introduced matter is placed within brackets.—J. H.]

EDINGTON, OR IDINGTON.

ABOUT a mile-and-a-half from Chirnside, on the road to Berwick, lies the small village of Edington. Mr. Carr, in his "History of Coldingham," derives the name of Edington from a "Saxon called Edwin or Edin," whom he supposes to have settled down here during the period of the heptarchy, or, at any rate, anterior to the Conquest. [It is variously called Hadynton, Hædentun, Edinton, Edington, Idington.] The manor was for several centuries held of the Priory of Coldingham, to whom it had been granted by King Edgar, by the family of Edington, who frequently occur as witnesses to its charters. Aldanus de Edington and his son Adam successively attested charters granted to it by Waltheve and Patrick, Earls of Dunbar, between the year 1166 and 1289. Robert de Edington also is among the witnesses to a charter in 1193*. On the 27th July, 1749, Jacobus de Edington, with John Ellem of Butterdean, Gavin Home of Manderston, and other twenty-one proprietors or inhabitants in Berwickshire, were summoned to appear before the Parliament, in answer to the charge of treason in having held out the castle of Dunbar against the king, and for having cruelly put to death some of his faithful lieges and servitors†. [They were often called, but never convicted‡.]

[I shall here introduce Mr. Watson's notes. The rest of the remarks will then supply what information can be gleaned concerning the subsequent occupants.

* Charters in Appendix to Raine's "North Durham."

† "Acts of Scot. Parl.," ii., p. 125.

‡ Chalmers' "Caledonia," ii., p. 282.

"Edington, or Idington, of that ilk, were chiefs of the name. Arms, azure, three savage heads coupé, argent. Thomas Edington de eodem before 1465, was one of the jury on service of Alexander Home in 1505. His grandson, John Idington, married Beatrix Home, 1518, whose son, David Edington, is mentioned in 1532-1575. His brother, Thomas Edington (1591), sold the estate to George Ramsay of Dalhousie, in 1598. His son, John Ramsay, married Giles Kello, 1627. His son, George Ramsay, married Margaret Seaton, 1644. His son, William Ramsay, sold the estate in 1690 to John Lauder, merchant in Edinburgh. He married Margaret Ramsay, and had two daughters, Margaret and Elizabeth, who sold the estate to John Fairholme of Robertson in 1714. He sold it in 1718 to William Hay of Drummelzier, who left it to his second son, William Hay, who was killed at the battle of Forgan in 1718, and was succeeded by his brother, Alexander of Drummelzier, in whose family it continues." [The termination of the Edington race is uncertain. One of the name held Claribad. David Edingtoune was a commander of troops in Sweden under the great Gustavus (1632?)*. It is still a Berwickshire surname. In 1563 we read of one John Edington, "commonly called the *Liar*, as he was always the messenger of strange news, which was commonly false." He was surprised, along with other associates in a strange conspiracy for robbing David Hume of Wedderburn, of the tiends of Kelloe, and "hid himself in the *aumry* of a poor old woman, from whence he was drawn, to the diversion of his enemies and his own great terror."†]

The barony of Edington was, by charter of date 2nd May, 1593-4, granted to Lord George Ramsay, of Dalhousie. It was afterwards confirmed to his son, 10th December, 1613‡.

[It is recorded of John Ramsay, that on the 4th June, 1634, "the Lord Advocate, and Home of Aytoun and John Ramsay of Edintoun, his informers," pursued "Elizabeth Bathgate, spouse to Alexander Pae, a maltsman in Eyemouth, for sorcerie." There were no less than seventeen charges against her, but the prosecution collapsed §. George Ramsay of Idington, who lived in the reign of Charles II, was a notable man, and suffered for his opinions, which were not of the court fashion, but those of the persecuted Covenanters. In 1661 he was appointed one of the Commissioners of Excise for the shire of Berwick ||. On July 28, 1681, he was one of the two M.P.s for Berwickshire. It was a disputed election, the claimant in opposition to him being Home

* Grant's "Memoirs of Sir John Hepburn," p. 257.

† Extract from Godscroft's MS. "History of the Homes."

‡ "Mag. Sigil," l. lvii, No. 86.

§ "Spottiswoode Miscellany," ii., p. 64-66.

|| "Laws and Acts of 1st Parl. Chas. II.," Edin., 1673, p. 36

of Wedderburn. "It was left undiscussed." Edgar of Weatherly, who belonged to the same party with Ramsay, carried his seat. His opponent was Mr. Charles Home, afterwards Earl. "When Weatherly was found by the Parliament legally elected one of the Members for Berwickshire, the Earl of Home (being piqued that his brother was rejected) offered to prove that Sir Patrick Home of Polwart had taken an engagement from Weatherly that he should be against the act for succession. But the King's Advocate, finding Home's information and probation was not good, it dwindled away to nothing."* The government bearing a grudge to Idington, summoned him and several more of suspected loyalty for resetting and harbouring rebels, before the Privy Council, August 2nd, 1683. Many were dismissed. "His guilt," and he was not alone, "was found more deep than others"; and accordingly he and those viewed with like disfavour, "were left in prison for some time," "but were at last also set at liberty upon caution." They appeared again before the Criminal Court, December 10th, 1683, but were, as before, let off with caution; till the 1st of April, 1684, when "the diet is deserted against George Ramsay of Idington and sundry others. But the King's Advocate declared that he intended to pursue them at Privy Council for an arbitrary fine."†

In 1677, Charles Home and a band of other Merse lairds seized by force Jean Home, the heiress of Ayton, then about twelve years of age, and carried her off across the Border, and married her to George Home, a boy, son of Kimmerghame, whom John Home of Ninewells conveyed in like manner surreptitiously from Edinburgh, having taken the poor fellow out of his bed. This illegal act was to prevent the next male-heir, Colonel John Home of Prendreguest from marrying her to a relation of his own, who was said to be William Ramsay of Edington, younger ‡.

Although the estate may have been sold in 1690, from a plea, November 15th, 1694, reported in Fountainhall (i., p. 643), there was still then a Ramsay designated of Idington.

The lady Idington, of 1678 (doubtless the dowager), was a daughter of Mr. William Kelly, who had seven daughters more, besides some who were dead. She had claims on the superiority of lands in "Newton-layes," near Dunbar (Ibid, i., p. 2); and had property near Dunbar, February 23, 1681 (Ibid, i., p. 132).

Jean Ramsay, relict of Sir Patrick Brown of Colston, left a

* Fountainhall's "Decisions," i., p. 149.

† Fountainhall's "Decisions," i., pp. 237, 249, 291. Wodrow's "History of the Sufferings," &c., iii., pp. 468, 474; iv., p. 64, but not exactly as to dates.

‡ Chambers' "Domestic Annals of Scotland," i., pp. 396, 391. Fountainhall's "Historical Notices," i., p. 180. "Men of the Merse," by A. C. Swinton, pp. 53, 54, 55.

bond of 1000 marks to lady Idington (probably the wife of George Ramsay), her brother's relict, in fee, and to Rachael and Jean Ramsays, two of her nieces, in fee. Lady Pitcairn, wife of the famous Dr. Pitcairn, another niece, was her executrix, and claimed the whole. This family quarrel was adjudicated on 1st January, 1706. (*Ibid*, ii., p. 305.) If these two nieces were daughters of George Ramsay, then Mr. Henderson errs in supposing Margaret Ramsay to have been an only daughter.]

George Ramsay appears to have left only one daughter, Margaret Ramsay. She became the third wife of Sir John Lauder, baronet, a merchant and baillie of Edinburgh, a younger branch and afterwards chief of the family of Lauder of the Bass and Lauder, and father of the eminent Sir John Lauder, Lord Fountainhall, by a former wife, Isabel Ellies, daughter of Alexander Ellies of Mortonhall. Sir John Lauder was 86 years of age when married to Margaret Ramsay in 1670. She seems to have borne him at least one son, George Lauder, who through the fraud of his mother, who is represented as a complete *Medea*, held the title of baronet, and inherited the estate of Edington. Sir George Lauder, from all we have been able to collect about him, was a very profane and reckless character, and in consequence of his lawless deeds came to an untimely end. He had been intimately acquainted with Mr. David Spence, of Chirnside West Mains—a small estate in the immediate vicinity of that village. In consequence of Sir George's licentious conduct, Spence's wife earnestly entreated him to avoid the baronet's company, which he did for some time. Sir George took great offence at this; he, however, invited Mr. Spence into a small change-house in Chirnside, kept by one Roger Home, at the south end of the village. Here they drank for some time, and had much altercation; but at last they were reconciled to one another, and were just about to part in good friendship, when some angry words arose, and Sir George, pulling a pistol from his pocket, shot Spence dead on the spot. This murder was committed in April, 1700. The Session Records of Chirnside merely state that "Lauder did not live long after this foulle murder"; but tradition says that he came to a violent end. He immediately mounted his steed and rode furiously towards Edington. Here he stayed not, but took his way to Berwick. On passing through Foulden, he encountered a wedding party, to whom he called to make way for him, as "that day he

had slain the prettiest man in Berwickshire." [According to another account it was Foulden fair day.] When he arrived at Berwick, some accounts say that he threw himself over the bridge into the Tweed, and then perished; others say that he went to the south, and drowned himself in the sea at Sunderland. The house of David Spence has long since been demolished; but a large pear tree, which grew in his garden, is still preserved. A late minister of Cockburnspath was of this family. The estate of West Mains is now incorporated with Ninewells.

Soon after this we hear of an Archibald Lauder of Edington, who seems to have been Sir George's brother; but he does not appear to have inherited the estate for any length of time.

[In that age of unconcern, county events were not commemorated; but a notice in Fountainhall's "Decisions" (ii., p. 104) which is almost as useful and entertaining as a chronicle, fills up a blank, and corroborates the traditional story. "July 12, 1700. Sir George Lauder of Iddington being deceased, and his immediate younger brother and apparent heir being abroad as chirurgion to a ship in the Indies, there is a bill given into the Lords by my Lord Secretary Carmichael, and other creditors of the said Sir George, craving that, till the return of the heir, or certioration to be given him, they would appoint Mr. Lauder, the youngest brother, to be factor, for shearing the crop, disposing of the stock on the ground, and uplifting the rents, &c. The Lords demurred, because the estate was not incumbered . . . yet the case being extraordinary, they interposed their authority to his being factor only for one year, in which time the apparent heir might return," &c.]

Mr. Hay, the proprietor of Edington in 1745, was confined in Berwick jail for some time upon a suspicion of favouring the Pretender.

[This barony was protected by an ancient castle-house or fortlet, of which no vestige remains, which is mentioned in 1497, when it belonged to the Idingtons and not the Lauders, as Mr. Carr, by a slip in his "History," p. 38, erroneously indicates. The ground which environed the castle was denominated the "Bastle-dikes," and is thus described by the Rev. Dr. Anderson in 1795. "Of all the grounds in the parish, that now called the Bastel-dikes, where shaped stones, and such as are used for cornices and lintels of doors, have been often turned up by the plough, is naturally the most fenced and inaccessible. It runs out on the west end, like a promontory, upon the broad stream of Whittadder, which there makes a turn upon its north banks,

that are, at least, 150 feet high, and have little more declivity than an upright wall. Much broken land, intersected with rivulets, secures it on the north side; and it is only open on the east, where there is, first, a sloping descent, and then a steep pathway down to Idington mill upon the water. The castle, or strong house, of that village and barony was a close guard to it."* It was overthrown in July, 1497, by the English army under the Earl of Surrey, who "made sharpe warre upon the Scottes,"† in retaliation for James IV. countenancing and furnishing assistance to Perkin Warbeck. Surrey, with his army of not less than 20,000 men, effected little. "He overthrew and defaced the castle at Caudstream (for thus Baker construes 'Cawdrestenes' or 'Cundrestine'), the tower of Heten-hall, the tower of Had-dington, the tower of Fulden, and at last by composition took the strong castle of Hayton and rased it to the ground."‡ Negotiation induced James to abandon the

"Cause of that mock Prince,
Warbeck, that Flemish counterfeit,
Who on the gibbet paid the cheat."

It is marvellous how Chirnside and its vicinity, so readily accessible to the Berwick garrison, which consisted of some of the best trained troops in England, escaped being pounced upon in those hot times, in revenge for the many inroads made by the Scots across the English Border. In 1565, when Mary Queen of Scots was in exasperation with Elizabeth and eagerly wished for war, while Elizabeth, contrary to the advice of her counsellors, sought to temporize, Bothwell, Mary's best general, to provoke the hostilities, made a raid across the Borders and carried off five or six prisoners. The Earl of Bedford, the large-headed sagacious English warden, made reprisals, "in the faint hope that it might force Elizabeth into a more courageous attitude. She first blamed Bedford; then, stung by an insolent letter from the Queen of Scots, she flashed up with momentary pride." § The original narrative can be gleaned from the correspondence of the two indignant sovereigns. Mary complains to Elizabeth, December 31, 1565: "Quhairas laitlie, as we ar suirlye informit, certane zour subjectis, to the nowmer of aucht hundrith personis, enterit within our Realme of Scotland, at the townis of Edingtoun and Chirnsyde, four mylis from Berwik or thairabout, and thair noch onlie maid slauchter, take presonaris, spulzeit and reft a greit quantitie of gudis, but als wa usit thame in sic sort as it had bene oppin weir and hostilitie betwix the twa Realmis, and zit detenis and keipis sum of the presonaris at Berwik, as if it wer

* Sir. J. Sinclair's "Stat. Account of Scotland," xiv., p. 36.

† Stowe's "Annales," by Howes, p. 479.

‡ Baker's "Chronicle," p. 243.

§ Froude's "History of England," viii., p. 232.

instant weir," &c. Elizabeth, of date January 9, 1566, throws back the blame upon the Scots, and tells us all that we shall probably ever know about the particulars of this unneighbourly squabble. "We tak this mater to be the same quhair of we hard in the begynning of December last, quhilkis wes, as we were informed credibly, sa far different from this as ze complane, aucht rather to have bene maid be our subjectis, being first spoyled, robbed, takin, hurt, and careit away be zouris; for recovery quhair of, some of ouris seeking to apprehend the thevis, quho had not only robbed our subjectis, and spoyled of their victuales quhilk thai had lauchfullie bocht, bot alswa robbed some of zouris, wer by ambusches of men of weir assailed and persewit in suche maner of hostilitie, as fyve or six of our subjectis wer takin lyke presonaris, with their horss and gudis; and sum utheris wer woundit and hurt to the perell of deith: Quhairupon as followed, as we think, that quhair of the complaint is now maid so grevous, that a couple of the capitanis of Berwik, with a small ordinarie nowmer, less be ane half than is contenit in zour letter, resortit quietlie to the place quhair our subjectis wer kepit as presonaris, to demand thame, and to bring thame home with thair horss and gudis, quhilk they could not fullie nor quietlie obtene, bayth becaus thei wer refusit, and for that thre of our subjectis wer careit as presonaris further in the land, and zit do remane, contraire to the ordour of peace."* From this it is evident that the people of Chirnside and Edington for seconding Bothwell, provoked the chastisement which they deservedly received. The matter was settled by Commissioners, and so ended the controversy for the present, but not the ill-will.]

It appears that in 1684, there lived in Edington a number of Covenanters—as we find the following; "William and John Yeomans in Idington, John Simpson sometime in Idington now in the Berwick bounds, James Cowan farmer in Idington, and Thomas Yeoman in Idington," among the list of fugitives against whom the hue and cry of the iniquitous government of that time was raised. [The same list also includes "Alexander Galbraith, son to Alexander Galbraith in Chirnside," and "David Cowan, servant to William Ker uncle to Greenhead."† We also find, 1st Dec., 1684, "Cowan, and Reston's tenants beside Berwick are apprehended, and sent in as prisoners as having been at Bothwell-bridge."‡ Moreover, in 1676, two years earlier, some thirty or forty in Chirnside and the country thereabout

* Bishop Keith's "Affairs of Church and State in Scotland," iii., pp. 353-357. See also Ridpath's "Border History," p. 619.

† Wodrow's "Hist. of the Sufferings," iv., p. 26.

‡ Fountainhall's "Decisions," i., p. 306.

had a decree passed against them in absence, for keeping conventicles*. On the 20th May, 1691, "David Cowan in Idingtoun, John Cowan there, David Cowan, in Ploughland," are members of the Rev. Henry Areskine's Kirk Session†. Some of them were doubtless the men that compromised the Laird of Edington with the Government. They were his own tenantry. Chirnside is the only locality in Berwickshire where a Cameronian church continues to the present day.]

[The castellated manor-house of Edington, which stood about a hundred yards southward from the turnpike road leading from Berwick to Dunse, must not be confounded with the bastle, or tower.] It was surrounded with a deep moat, part of which still remains. All that now survives is a wall of seven or eight feet in height, and about fifty feet in length, which appears to have formed the south side of the building, saved because it forms part of Edington market-garden wall. Ninety years ago—viz., 1778—a considerable portion of its walls were standing, and while removing some of the rubbish, the gardener, it is said, found no contemptible treasure, which enabled him to rise in the world and become the ancestor of a race of farmers in the district.

In December, 1834, there was taken down an old farm house at Edington. It was supposed to have stood 140 years or thereabout. Like most old edifices it was haunted by an unquiet spirit or ghost, because it had been the scene of a murder or murders in times long gone by. In 1766 and downwards, this house was tenanted by a Dr. Colin Lauder, who farmed a portion of the adjoining lands. Like the most of the farmers in those days, eighty years ago (when the author wrote), he was no way eminent as an agriculturist; my father recollected to have seen some of his fields, consisting of the finest land in the Merse, so overrun with thistles that it was difficult to perceive the corn for them. Though Dr. Lauder did not practice as a physician, he occasionally prescribed for the benefit of his neighbours; and our informant says that his prescription for a pain in the bowels was, "soot mixed with a draught of new milk"; and for a bleeding at the nose, "the powder of a dried toad snuffed up the nostrils"; for an *income* of the hand, "a

* Wodrow, ii, p. 326.

† "History of the Club," iii, p. 191.

poultice of doo's (pigeon's) dung"; and for an *inward* decay, "the tea of Foxglove leaves." It is said that Dr. Lauder had a son, who, because the driver of a hackney coach did not drive fast enough, got out of the carriage in a great rage and stabbed him to the heart.

[The valued rent of the Laird of Idington in 1649, was £2888.] The barony of Edington, comprehending Edington, Edington Mains, Edington Hill, consists of above 1300 acres—the greater part of which is land of the finest quality. The large farm house of Edington Hill, built in 1779, is said to have been partly erected out of the old castle of Edington. On this farm there is a field called the Goat-knowes, and a well called the Goat-well, from the circumstance of Dr. Lauder, mentioned above, having kept a flock of goats there. A large space of the lands of Edington Hill was planted with wood sometime after the commencement of the present century. The present tenant of Edington Hill and Edington Mains, is Mr. John Wilson, the descendant of a family who have been tenants of a part of the lands of Edington for upwards of a century. [Mr. Wilson is well known as a representative Scottish farmer, and author of a work on "British Agriculture," enlarged from the treatise on that subject contributed to the "Encyclopædia Britannica."]

Edington Mill is romantically situated on the Whitadder, near the south-east point of the parish. The banks of the river here are highly picturesque and beautiful. A quarry of a light-grey sandstone has been wrought here for many years past. George Paterson was tenant here in 1714. One of the same name was tenant in Edington, 1749. He was succeeded by a family of the name of Hogg, who were tenants here for about a century. [The Hoggs carried on a great trade in London in *groats*, *i.e.*, oats with the husks taken off.] About 40 acres of land are let along with the Mill. The Mill was rebuilt in 1853.

Ploughland was a farm place which stood on the north side of the Edington estate. It now forms part of the farm of Edington Hill. There was a David Cowan in Ploughland in 1593. David Nesbit was tenant here in 1728, and William Neill in 1765. It was inhabited in 1775.

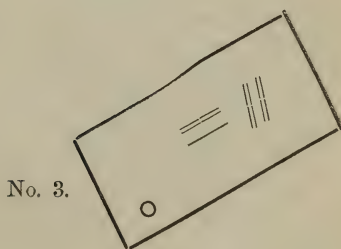
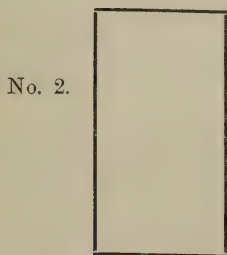
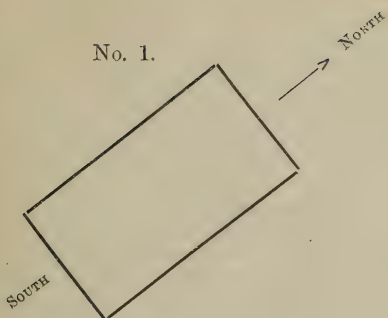
[ADDITIONAL NOTE.—David Edington of that Ilk was one of the Merse proprietors who, in 1567, after the abdication of Mary, signed a bond of adherence to the youthful James VI. as king. (Crawfurd's "Officers of State," p. 443.)]

[Dr. Stuart has furnished a list of plants found on Edington Hill Moor, of which the following are the more select :—

<i>Anemone nemorosa</i> .	<i>Veronica anagallis</i> .
<i>Corydalis claviculata</i> .	<i>Orchis latifolia</i> , var. <i>carnosa</i> , in
<i>Viola palustris</i> .	bogs.
<i>Hypericum quadrangulum</i> .	<i>Habenaria chlorantha</i> .
" <i>perforatum</i> .	<i>Epipactis latifolia</i> (Mains road).
<i>Vicia lathyroides</i> .	<i>Equisetum sylvaticum</i> .
<i>Trollius Europæus</i> , in great	<i>Lastræa spinulosa</i> .
abundance.	<i>Polypodium Dryopteris</i> .
<i>Senecio sylvatica</i> .	<i>Hydrocotyle vulgaris</i> .
<i>Pyrola minor</i> .	<i>Pinguicula vulgaris</i> .
" <i>media</i> .	<i>Comarum palustre</i> .
<i>Myosotis palustris</i> .	<i>Gnaphalium dioicum</i> .
" <i>repens</i> .	<i>Athyrium filix-foemina</i> , var.
" <i>cæspitosa</i> .	<i>Sudetica</i> .]

Note of Cists at Sunlaws. By FRANCIS DOUGLAS, M.D.

ON the 7th of January, 1873, a deep furrow by a plough in a field to the north of the Home Farm of Sunlaws, revealed the existence of an ancient cist. It was at once carefully explored by the farm-steward, Mr. Wilson, and found to contain a few human bones. These, on the 9th, I saw after their removal from the cist, and they consisted of portions of a skull, chiefly of the occiput and parietal bones (the sutures not ossified); a portion of the lower maxilla, with several teeth attached; and portions of long bones. There was no urn. The cist was discovered at the summit of a knoll, having a declivity to the north, and about 300 or 400 yards from the river Teviot. In the immediate neighbourhood are caves in the sandstone rock overhanging the river. The cist No. 1 on the diagram was $2\frac{1}{2}$ feet in length by 18 inches in width, and about 14 inches in depth. The stones were rude slabs of red sandstone varying from one to four inches in thickness, the largest two feet in length by fourteen inches in width; there was no covering stone nor any sole; the cist was filled with earth and sand corresponding to the subsoil, and its upper edge was not more than eight inches from the surface. The longitudinal direction of the cist was nearly north and south, and it was at the northern end that the cranial bones were found. At the



○ The Urn.
||| Long Bones.

request of Mr. Scott Kerr, the proprietor of Sunlaws, I visited the spot on Thursday afternoon, the 9th of January, and ascertained the above mentioned particulars. The steward then showed me two stone slabs first disclosed by the plough, which he conceived were likewise cists. As evening was approaching, time did not then suffice for a careful exploration, and the examination was therefore deferred till Saturday, the 11th, when it was conducted in the presence of Messrs. J. B. and W. B. Boyd, and of Drs. F. and C. Douglas.

The earth having been removed from the surface of cist No. 2, there was disclosed an irregularly shaped slab of grey sandstone, $5\frac{1}{2}$ long by about 4 feet in width, at its greatest breadth, and tapering to about 2 feet. A fissure extended throughout its entire length. It proved to be very heavy, and when removed in halves was found to be nearly a foot in thickness. Underneath this slab was a well-shaped cist, $3\frac{1}{2}$ feet long, 20 inches broad, and 18 inches deep. The side slabs consisted of red sandstone, from two to three inches in thickness. Although most carefully examined, this cist was found to contain nothing but sand—not a vestige of bone, ash, or urn. There was no sole. This cist lay nearly N.W. by S.E.

Distant a few feet from No. 2, a third cist was covered by a large stone, also in two pieces, and measuring 4 feet by about $2\frac{1}{2}$ feet. It lay north and south, nearly corresponding to the direction of No. 1. After removing a good deal of soil and sand, several portions, in a friable state, of a sun-dried vase, or urn, were turned up. It was filled with fine sand only, and its exterior surface had the appearance of having been charred. The lower portion of the urn was carefully removed, and measured $10\frac{1}{2}$ inches in circumference. Its walls were little more than a quarter of an inch in thickness, and, as before stated, were very friable. Only the lower part was able to be removed. Its surface was perfectly plain, and did not appear to have borne any pattern or device. In this cist were also found several bones, very much decayed, but the femur and its condyles were quite distinct, lying towards the northern extremity. Another portion of a long bone, probably the humerus, lay towards the south end of the cist. This cist was somewhat irregular in shape: length, 3 feet 9 inches; width at the northern extremity, $2\frac{1}{2}$ feet; at the southern, 2 feet; depth

of perpendicular slabs, 22 inches. Like the preceding, this cist was filled with fine sand, and had no slab for a base. Mr. Scott Kerr has presented the remains of the urn to the museum of the Tweedside Physical and Antiquarian Society in Kelso.

In the "Proceedings of the Club," Vol. ii., pp. 74-5, I described the discovery, in March, 1843, of a similar cist on the banks of the Tweed, about $2\frac{1}{2}$ miles below Kelso. In this case there was a skeleton and an urn; but the cist was found at a depth of six feet below the surface, and excepting in the urn itself, no earth was found in the interior. The Sunlaws cists were so near to the surface that the effect of rain during the many centuries they had there lain, would gradually fill them with particles of sandy earth, which would obtain easy admittance through the many crevices between the slabs composing them.

On the Appearance of the Common Crossbill at Paxton, in the parish of Hutton. By GEORGE MUIRHEAD.

AMONGST the various kinds of small birds, there are few more interesting than the crossbill (*Loxia Curvirostra*). Its peculiar call note while passing in flocks high overhead in the air, its bright coloured plumage, and the singular attitudes which it assumes while feeding, render it an object of attraction to all those who attend to the habits and appearance of the different sorts of birds. It is somewhat larger than the greenfinch, to which it bears some resemblance. It feeds chiefly on the seeds of the larch and spruce fir trees, the cones of which it sometimes cuts off with its powerful beak and holds in its claws like a hawk. It is very dexterous in extracting the seeds from the cones.

According to Selby, the crossbill is only occasionally seen in Berwickshire. Several small straggling flocks of from

ten to twenty birds visited the neighbourhood of Paxton in the month of September last, and fed on the cones of the larch and spruce fir trees in the policy of Paxton House. They appeared to be mostly young birds, and may have been bred in some of the fir woods in the county: as the editor of "The Field," to whom a note of the appearance of the crossbill in Berwickshire was sent, states that instances are on record of its having nested in Northumberland; and Mr. Turnbull, in his "Birds of East Lothian," mentions that the nest has been found in that county. Mr. R. Gray, in his "Birds of the West of Scotland," relates that the crossbill has nested in several counties in Scotland. It seems to be in the habit of breeding at various times during the spring and summer; for Mr. St. John, in his "Natural History and Sport in Moray," says that he received a nest and four eggs, which were taken in the Balnagowan woods, near Tain, in Ross-shire, in March, 1854, and also that he has seen old birds feeding newly-flown young ones, at different times, from April to August. He also mentions having discovered the nests of the crossbill in the woods near Dulsie, in Morayshire, but that he never found either eggs or young birds in them, owing to the early and also uncertain periods at which the bird breeds. He likewise says that the nest is easily distinguished from that of any other bird, and that it is flat and loosely built, and can be nearly seen through; and consists of grass and wool bound together by tolerably large twigs of the fir tree. It is placed on the horizontal branches of the Scotch fir, at no great height from the ground, and in some instances within reach of the hand. The eggs are very similar to those of the greenfinch, but are slightly larger.

[Crossbills, in small flocks, have been in unusual abundance to the south of Edinburgh. Some were shot in February (1874) near Jedburgh; and in the end of January they were heard of both at Haddon-rig and near Yetholm. The Paxton birds may have been an early detachment of the same stranger visitants.]

Arrival, Departure, and Local Migration of Birds, near Oldcambus, 1873. By JAMES HARDY.

- JAN. 2. Seven Herons on the rocks, the number present at this date.
- Jan. 11. Nine Cormorants at Siccar Point.
- Jan. 15. Many Mallards in Greenheugh bay.
- Jan. 22. One female Stone-chat remains at marsh on sea-side.
- Jan. 24. Fifteen Curlews on the shore.
- Feb. 8. Mallards have left the coast.
- Feb. 16. Golden Plovers hovering about the fields at evening.
- Feb. 17, 18. Lapwings returned to the coast fields, having been absent for a considerable time.
- Feb. 18. Male Stone-chat among whins in Oldcambus dean.
- Mar. 2. Lapwings and Plovers in the lowland fields, the Lammermoors being covered with snow. March 3. Dispersed and calling their notes; calling also far on in the night, by moonlight.
- Mar. 6. Pied Wagtail here; and again on the 8th, at its old nesting place.
- Mar. 8. Many Lapwings driven by snow from the hills; but again on the 9th calling in their summer haunts.
- Mar. 12. Mallards paired in burns.
- Mar. 13. Fieldfares seen. Eider ducks appear on the coast. Four Herons still on the shore. A dozen Redshanks in a flock. They are usually scattered.
- Mar. 14. Bands of Wild Geese. Lapwings again re-assembled, owing to snow-fall.
- Mar. 17. Several young grey Gulls among those of mature plumage.
- Mar. 27. Wild Geese heard.
- Mar. 28. Three Wheat-ears appeared on the sea-banks, but disappeared on 31st. Only two Herons visible; not seen on 31st.
- Mar. 30. Corn Bunting seen.
- Mar. 31. Only two Cormorants seen; and only three Redshanks. No Stone-chat. Gannets first observed coming down the Frith, on fishing expeditions.
- April 1. There are nineteen Curlews still along the shore; Redshank present, but absent on 3rd and 4th.
- April 2. Six Wheat-ears more inland. Water-hen has returned to its breeding ponds. Four Cormorants seen, all in their summer dress.
- April 8. Only three Curlews left. At this period they began coming and going between the hills and the sea-coast; but only two or three settled in the inland bogs. One Redshank left behind.
- April 9. Only one Cormorant; seen also on the 10th fishing at sea. The number of Curlews at sea-side is seven. A migrat-

ing party of twenty Lapwings flying northwards. Pair of Stone-chats returned in full plumage, but left next day. Gannets more frequent off the coast. A solitary Heron remains; continued all the summer.

April 11. A male Cormorant still left on its rock. Nine Curlews seen. A party of Oyster-catchers feeding near Siccar; not seen again.

April 12. One Redshank is left behind near Cove; and another at Greenheugh. Five or six Curlews.

April 15. Six Eider-duck again; but not noticed subsequently till June, in Fastcastle direction. Only three Curlews, and on the 16th none. At this period a great number haunted the bogs on Penmanshiel Moor, having freshly arrived.

April 17. There were four Herons on the rocks; only two on the 19th, and thereafter the solitary bird. A pair of Stone-chats in company with a party of Wheat-ears. This party departed on the 18th.

April 20. *Sylvia trochilus* arrived. Three Curlews on the coast; and up to 24th sometimes one and sometimes all absent.

April 25, 26. Hills covered with snow; the Highland hills completely white. A very large flock of Fieldfares, some thousands in number, in Penmanshiel pasture fields, tearing up old cowdung for insect food. They left May 3rd. They were also seen at Quix wood, on ground where whins had been burnt.

April 28. Wheat-ear paired inland.

April 29. The single Cormorant seen off at sea several days till this date.

May 1. Cuckoo seen. Called on 8th, but very faint.

May 2. One Chimney Swallow seen; and again on 3rd. *Sylvia trochilus* more spread into the hedges, and among furze. Eleven Curlews again driven to the shore by cold weather. A company of seven Lapwings passing northwards.

May 5. Redstart arrived, a male; saw the female on the 6th; both seen on the 7th, and not again.

May 6. Several Wheat-ears, apparently a new detachment, passing northwards along the coast.

May 7. Five Chimney Swallows present, and remain. More fresh Wheat-ears on the coast; left on the 8th.

May 8. *Sylvia sibilatrix* in Pease dean. No Black-cap or White-throat yet; and no Ring Ouzel this year.

May 9. The Curlews again driven to the shore; fifteen seen.

May 10. White-throat arrived.

June 12. Three Curlews remain on the shore. Redshank heard; and the single one left was seen on 12th and 19th.

June 25. There were still three Curlews; but on July 1 there were five; and they were circulating during a mist between the hills and the shore. There were seven on July 2.

- July 1. Several Redshanks have returned; one Heron alone visible.
- July 5. Black-headed Gulls appear on the coast fields. Five Lapwings came to the fields.
- July 7. Becoming very droughty. Upwards of thirty Curlews in a band on the coast at Greenheugh; and from thirteen to fourteen Redshanks in small parties; and there are now twelve Herons stationed on rocks all along the sea brink, as the tide rose. Several Black-headed Gulls along with the common Gull at foot of Pease burn.
- July 8. Large collection of Lapwings among the Swedish turnips.
- July 10. Still a pair of late-breeding Curlews remain on the moor at Penmanshiel.
- July 12. Curlews begin to disperse along the beach.
- July 28. Curlews and Redshanks in full force on the shore; no Cormorants yet.
- Aug. 6. Wheat-ears seen for the last time on the coast.
- Aug. 14. Fourteen Herons at the shore. Redshanks still in flocks. Linnets in flocks. Garden Warbler seen for the last time; a family, young and old.
- Aug. 15. White-throat seen, but not afterwards.
- Aug. 19. Immense flock of Lapwings on flat shore near Dunglass, along with Curlews and Redshanks. A flock of Oyster-catchers there also; not seen again.
- Aug. 26. A female Whin-chat seen at sea-coast. First Cormorant arrived, a single one; five returned on the 27th, two old and three young.
- Aug. 29. Three Stone-chats returned to the dean.
- Sept. 1. A family party of Stone-chats in the dean, a pair and their young, and continued till 23rd. Swift last seen.
- Sept. 6. Lapwings on leas frequented by sheep, or on the shore when the tide recedes.
- Sept. 13. Meadow-pipets in large numbers from the moors haunt the sea-banks.
- Sept. 15. Large numbers of young Pied Wagtails near the mouth of the Tweed, above the Railway bridge. At Oldcambus only one Wagtail remains, and continued till 29th. Swallows and Martins still at Berwick.
- Sept. 21. Chimney Swallows left.
- Sept. 23. There were ten Cormorants at Siccar, and on 24th there were fourteen. Curlews scarcer.
- Sept. 27. Three Black-headed Gulls associated with Lapwings; and on the 29th with them and Starlings, on leas. Several Stone-chats along the shore.
- Oct. 5. Wild Geese heard, and again on 25th.
- Oct. 28. First Woodcock seen on the coast; one was seen on the hills above Wooler, Oct. 4. On the sheep being withdrawn, the Lapwings have left and gone nearer East Lothian.

- Oct. 31. First Fieldfare among junipers, Ewieside Hill; at Pease bridge on Nov. 9.
- Nov. 2. Lapwings and Plovers in the fields near Cockburnspath, where they remained throughout the winter.
- Nov. 3. About twenty-five Mallards appeared at Greenheugh, and continued during the winter; visiting inland ponds and feeding grounds after nightfall.
- Nov. 4. No young Gulls observed among others on the coast.
- Nov. 10. Snow-flakes heard; on the 15th, a flock of from twenty to thirty seen, and again on the 17th and 29th.
- Dec. 4. One female Stone-chat alone left at the coast.
- Dec. 17. A great wind on the 16th, blew the Lapwings from the East Lothian coast to their old haunts. They continued till 23rd in sheep-folds.
- Dec. 31. Curlews at sea-coast are few and scattered.
- Jan. 23, 1874. Twenty-five Cormorants gathered at Siccar; they were mostly in a row on a curved ridge of rock. This is the largest assemblage I ever saw together, and probably represents the number wintering on this part of the coast.

Extracts from a Book kept by Geo. Waldie Griffiths, Esq., of Henderside Park, Kelso, showing the numbers and weight of Salmon and Grilse caught with the rod in his waters, in the river Tweed, about three miles below Kelso, on the north side.

Year 1868.

In August, on 25th, 26th, and 31st, trial made without success.
 „ September, on 15th (nets now off), 1 Grilse, weight 5lbs 12oz.
 „ „ 23rd 1 Grilse, weight 3lbs 4oz.

During October. Total Salmon and Grilse 44
 „ November. „ „ 34

The total caught, 90, weighing 1394lbs 10oz; giving an average weight of $15\frac{1}{2}$ lbs.

Number of days fished, 40. Heaviest fish, 30lbs.

114 *Numbers and Weight of Salmon and Grilse.*

Total number of days fished (including two half days), 29.
Heaviest fish caught, 27lbs.*

Year 1873.

In August, 2 days fishing, caught Salmon 2, altogether weighing 15lbs 8oz.

„ September, 8th and 10th, caught Salmon 3, altogether weighing 42lbs 8oz.

„ September, 15th to 30th, caught Salmon 4, altogether weighing 144lb; Grilse 7, altogether weighing 51lbs.

Total number of days fished, 51. Unsuccessful in upper water, 5; do. in lower water, 5.

In this year, an additional stretch of water acquired lower down.

In the *upper* water, viz., being the same water as that fished in previous five years—

	Salmon.		Grilse.	
	No.	Weight.	No.	Weight.
Fish caught -	170	3602lbs.	96	783lbs.
In <i>lower water</i> , fish caught -	43		46	
Total Salmon and Grilse, 89.				

Average weight of Salmon in both waters, 21lbs.

„ Grilse „ 8lbs.

Heaviest fish (caught in lower water, 18th November), 35lbs.

ABSTRACT OF FOREGOING RETURNS.

	1868.	1869.	1870.
Salmon and Grilse - -	Total 88	Total 100	Total 92
Average weight - -	17½lbs.	14½lbs.	14½lbs.
Heaviest Fish - -	30lbs.	36lbs.	31½lbs.
Number of days fished -	40.	32.	30.

	1871.	1872.	1873.
Salmon and Grilse -	Salmon 66 Grilse 33	Salmon 46 Grilse 42	Sal. 170 Grilse 96
Average weight - -	Sal. 20lbs. Gril. 8lbs.	Sal. 19½lbs. Gril. 7½lbs.	Sal. 21lbs. Gril. 8lbs.
Heaviest fish - -	37lbs.	27lbs.	35lbs.
Number of days fished -	41.	29.	41.

* There is a discrepancy in this return; nine salmon have been omitted on one or other of the days,

Return of Fish Caught in Carham Lower Water. By
R. HODGSON HUNTLEY, Esq.

1870. From Feb. 1 to Sep. 14. 1870. From Sep. 14 to Nov. 30.

	Average Weights.		Average Weights.	
Clean Salmon	10lbs.		19lbs.	} No Grilse killed this year above 11lbs weight.
„ Grilse	6 „		5½ „	
„ Bull Trout	5 „		3½ „	
Unclean Salmon	8¾ „			
„ Grilse	7 „			
„ Bull Trout	3½ „			

1871.

Clean Salmon	12 „	.....12 „	One clean Grilse killed only on 27 Oct., 12lbs.
„ Grilse	5½ „	.....7¾ „	
„ Bull Trout	5 „	.....5 „	
Unclean Salmon	11 „		
„ Grilse	6 „		
„ Bull Trout ..	3½ „		

1872.

Clean Salmon	17 „	.....20 „	3 clean Grilse killed 1, on Oct. 15, 12lbs 1, „ 19, 12lbs 1, „ 28, 12lbs
„ Grilse	5 „	.....7¾ „	
„ Bull Trout	3½ „	.....3½ „	
Unclean Salmon	15½ „		
„ Grilse	7 „		
„ Bull Trout ..	3½ „		

1873.

Clean Salmon	9½ „	13 Oct., 1 Grilse, 12 lbs
„ Grilse	6 „	12 Nov. 1 „ 12 lbs
„ Bull Trout	3¾ „	12 „ 1 „ 13 lbs
		12 „ 1 „ 14½ lbs
		26 „ 1 „ 12½ lbs
		29 „ 1 „ 13 lbs

The following remarks on the fishing of 1873 appeared in a letter to the “Scotsman” newspaper:—

“Carham Hall, Coldstream, December 15th, 1873.

Sir,—*Apropos* to the question whether the ‘grilse’ of 1873 become ‘salmon’ in 1874, some light may be obtained by the character of the respective weight of fish captured at various seasons in either character. I have extracted the following statistics from the register of fishing in the lower water at Carham

during the past season, which, especially towards its close, has been exceptionally favourable to the angler:—1. The average weight of clean salmon killed between 1st February and 14th September, when netting ceases, has been $9\frac{1}{2}$ lb. 2. The average weight of unclean salmon landed during the same period and restored to the river was 14lb. 3. The average weight of clean salmon killed between 14th September and 30th November, when angling ceases, was $22\frac{1}{2}$ lb. 4. The average weight of clean grilse killed between 1st February and 14th September, was 6lb. 5. And of unclean grilse, during the same period, returned to the river, $6\frac{1}{4}$ lb. 6. The average weight of clean grilse killed between 14th September and 30th November, was 9lb. On 13th October, a grilse was killed weighing 12lb.; on 15th ditto, 11lb.; on 5th November, 11lb.; on 14th ditto, 11lb.; on 25th ditto, 11lb. On the 25th November, Mr. Percival Wilkinson, besides landing nine salmon, varying from 10lb. to 30lb. in weight, killed seven grilse weighing 76lb., three of which turned the scales at 12lb., 13lb., and $14\frac{1}{4}$ lb. respectively. On the 26th November, Mr. Ilderton killed two grilse, weighing $11\frac{1}{2}$ lb. and $12\frac{1}{2}$ lb.; and the same day landed a salmon 45lb., being the largest fish caught in Carham water this year. The above statistics do not, it is true, lead to any definite conclusion, but they, to my mind, are not calculated to remove the hesitation I feel to accept the theory that ‘grilse’ are the earlier stage of the ‘salmon.’—I am, &c.,

R. H. HUNTLEY.”

Statistics and Notes as to Tweed Salmon Fishings.
Communicated by GEORGE L. PAULIN.

Estimated Annual Produce of River Tweed.

SEASON.	SALMON.	GRILSE.	TROUT.	SEASON.	SALMON.	GRILSE.	TROUT.
1864.	7,982	27,294	39,250	1869.	6,932	9,622	43,287
1865.	5,745	13,947	26,976	1870.	8,682	17,968	22,858
1866.	8,468	23,979	44,408	1871.	7,686	22,198	36,236
1867.	10,572	23,448	35,355	1872.	17,245	15,693	22,260
1868.	12,938	4,078	31,605	1873.	12,320	18,533	29,531

Average Weight of Salmon, &c.

SEASON.	SALMON.		GRILSE.		TROUT.	SEASON.	SALMON.		GRILSE.		TROUT.
	lb.	oz.	lb.	oz.	lb. oz.		lb.	oz.	lb.	oz.	lb. oz.
1860.	10	7	4	11	3 7	1867.	11	6	4	9	4 3
1861.	11	11	4	8	3 9	1868.	11	4	4	0	3 15
1862.	11	3	5	3	3 13	1869.	10	6	4	6	3 13
1863.	11	10	4	13	3 10	1870.	11	6	4	11	4 2
1864	10	2	4	2	3 9	1871.	12	6	4	14	3 9
1865.	10	7	4	7	4 0	1872.	12	9	5	5	4 7
1866.	10	10	4	13	3 9	1873	12	10	5	2	3 15

Sexes of Salmon and Grilse.

Supposing the number of fish of which the sex was ascertained to be represented by 100, the proportion of male and female fish was as follows :—

SALMON.				GRILSE.	
SEASON.		MALE.	FEMALE	MALE.	FEMALE.
1870	...	35	65	48	52
1871	...	30	70	44	56
1872	...	35	65	45	55
1873	...	37	63	46	54

Weight of Large Salmon.

SEASON.	From 25 to 30lbs each.	From 30 to 35lbs. each.	From 35 to 40lbs. each.	Above 40lbs.	The Three largest weighed respectively.
1867.	25	5	4	1	42½, 39, and 38½ lbs.
1869.	20	2	—	4	57, 44, and 42 lbs.
1870.	16	5	—	—	34½, 33, and 33 lbs.
1871.	31	3	1	1	41 35½, and 32 lbs.
1873.	37	17	9	4	47, 45, and 42 lbs.

Returns for Seasons 1868 and 1872 mislaid.

During the net season (180 days) of 1872, the Tweed was above the ordinary summer level on 160, and at and below the same on 20 days. The largest "spate" was on the 30th March, when 8 feet 10 inches was registered.

During the season of 1873, the number of days on which the Tweed was above the ordinary summer level was 87, and at and below, 93; and the largest spat was on the 27th February, when 4 feet 4 inches was registered.

An account of the several days in each Winter on which Ice was stored by the Berwick Salmon Fisheries Company, from the year 1846 to 1873. By GEORGE L. PAULIN.

(Continuation of Table in Vol. ii., p. 144.)

Winter of	Days on which Ice was Stored.	Remarks.
1845-46	No frost	Ice imported.
1846-47	1846, Dec. 3, 4, 5, 7, 14, 15, 16, 17.....	Ice-houses filled.
1847-48	1848, Jan. 12, 20, 21, 22, 24, 25, 26,	Do.
1848-49	1848, Dec. 23; 1849, Jan. 1, 4, 5, 6, 8,	Do.
1849-50	1849, Dec. 29, 31; 1850, Jan. 1, 3, 9, 10,	Do.
1850-51	{1850, Dec. 2, the only day and 883 loads} obtained.....}	Ice imported.
1851-52	{1852, Feb. 21, 23, 25, 26; March 4, 5,} 1848 loads obtained,	Do.
1852-53	1853, Feb. 12, 14, 15, 16,	Ice-houses filled.
1853-54	... Dec. 29, 30, 31,; 1854, Jan. 2, 3,	Do.
1854-55	1854, Dec. 29; 1855, Jan. 31; Feb. 1, 2,	Do.
1855-56	1855, Dec. 13, 14, 21, 22,	Do.
1856-57	1856, Dec. 3, 4, 29, 30,	Do.
1857-58	{1858, Jan. 27, 28; Feb. 2, 3, 4, 5, 19, 20,} Feb. 22, 23, 24; March 9, 10,	Do.
1858-59	No frost	Ice imported.
1859-60	1859, Dec. 16, 17, 19, 20,	Ice houses filled.
1860-61	1860, Dec. 24, 26, 27, 28,	Do.
1861-62	1861, Nov. 19; Dec. 26, 27, 28,	Do.
1862-63	{1862, Nov. 26; 1863, Feb. 16, about 320 } tons stored	Ice-h. partly filled.
1863-64	1864, Jan. 4, 5, 6, 7, 8, 9,	Ice-houses filled.
1864-65	1865, Jan. 4, 24, 26, 28, 30, 31; Feb. 13,	Do.
1865-66	{1866, Jan. 13; March 1, 2, 6, about 450} tons stored,	Ice-houses partly filled.
1866-67	1867, Jan. 3, 4, 5, 7, 8,	Ice-houses filled.
1867-68	No frost	Ice imported.
1868-69	1869, Jan. 1, 2, about 200 tons stored.....	Do.
1869-70	1869, Dec. 2, 3, 4, 6, 7, 29, 30, 31,	Ice-houses filled.
1870-71	1870, Dec. 24, 26, 27, 28, 29,	Do.
1871-72	No frost	Ice imported.
1872-73	{1872, Dec. 14, 16; 1873, Jan. 22, 25; Feb. } 25, 26,	Ice-houses partly filled.

The Hail Shower of the 22nd July, 1873, at Chirnside.
By CHARLES STUART, M.D.

ON Tuesday the 22nd July, about 10 minutes to 5 o'clock p.m., a remarkable shower of ice or hail fell over a considerable district of country in Berwickshire, extending from Reston on the north and east to Whitsomehill on the south. The weather had been for two days unusually sultry, temperature at 400 above sea level, 82° in the shade. The thunderstorm which followed the shower came in an easterly direction up the Tweed and Whitadder. While standing in the garden watching the approaching storm, I perceived something fly through the air and fall with a noise among the leaves of the bushes. I at first considered it to be lightning; but presently another piece of ice—for the first was undoubtedly one—fell on the walk near me, and I picked it up: an irregular crystallized mass, larger than a boy's marble. Immediately a number fell, till the shower was at its height, and continued for ten minutes. For the most part, the pieces of ice were of a rounded form, flattened occasionally on the upper surface; but some were angular masses, very sharp and formidable looking had they come in contact with the face. The largest piece which was measured was no less than $3\frac{1}{4}$ inches in circumference, and many others $2\frac{1}{2}$ inches. The noise produced by the hail on the roofs of the houses and on the foliage of the trees was very loud, and unusual in its character. Falling on a flat pitched glass roof, they went through like pistol bullets. Hartley's patent rough plate, however, remained uninjured; but considerable damage was done in the district to horticultural glass and window panes. Upon inquiry, I find that none of the old men remember of a shower of such considerable sized pieces of ice having fallen for forty-three years, and at that time, so far as can be ascertained, the hail was smaller in size; so that the shower, for violence while it lasted and size of the hail, is unprecedented in the memory of the oldest inhabitant. For half-an-hour after it fell the hail lay unmelted in a grass field next my house, and was gathered in quantity and used to ice the water, which was very warm. The shower was partial; a mile to the east and to the west of Chirnside very little fell; but four miles to the south, at Whitsomehill, and at Reston, five miles to the north-east, it was very severely felt. The thunderstorm, that raged more

or less for fifteen hours afterwards, was of an awful character, and occasioned considerable loss among stock and buildings in this district.

Dr. Turnbull, of Coldstream, has informed me that at Moneylaws on the other side of the Tweed—where a woman was killed by the lightning,—the ice-shower was felt there severely ; so that it extended much farther south than mentioned in this notice. I have also been informed since writing this, that a mason returning to Allanton near the Free Church, during the shower, was struck on the head by a piece of ice the size of a man's fist, and a severe contusion of the scalp was occasioned by the blow.

On the Kingfisher and other Birds. By JOHN FERGUSON.

KINGFISHER, *Alcedo ispida*.—This bird is far from being uncommon on the Whitadder and its tributaries near Allanton ; and I have had frequent opportunities of observing its habits, more particularly as respects its nidification. In July, 1872, I discovered two nests within a hundred yards of each other, in a sand bank at the side of a burn which flows into the Whitadder a little above Hutton Hall Castle. What attracted my attention to them was the quantity of excrement running out of the holes in which they were. These holes were bored in the manner of a sand-martin's nest into the bank, and were from two-and-a-half feet to a yard in length. On inserting my hand, I found three young birds in one nest and seven in the other, all nearly full-feathered. They were of the same colour as the old birds, but the whitish bar on the shoulder was scarcely so distinct. Quantities of small fish bones, which had been apparently ejected from the stomachs of the birds were lying strewn about at the farther end of the hole, and on these the young were lying. Of the willow down and other materials spoken of by some ornithologists as forming the lining of the kingfisher's nest, I could find no vestige. The nests themselves were quite clean, although the entrances

were so choked up with filth that it was a marvel the old birds could get in. I concealed myself behind a hedge which runs parallel to the course of the burn, within a few feet of one of the nests, and after waiting a few minutes saw one of the parent birds, carrying a minnow in its bill, fly rapidly up and down the burn several times, and finally alight on a stone immediately beneath the hole. The minnow was carried by the tail, and was evidently quite dead. After looking about suspiciously for a little, the bird entered the nest. It remained there about a minute and then darted out with the speed of an arrow. The manner in which it left the nest contrasted strangely enough with its cautious mode of approaching it. I once discovered a kingfisher's nest with eggs. These were of a pinkish white colour, which became a pure white when they were blown. They were about the size of the eggs of the dipper, but more oval in shape. The kingfisher, when in search of food, generally takes its station on a bough overhanging a stream. After surveying the water beneath attentively for a while, it darts into the air, supports itself there for a few seconds by rapid vibrations of the pinions, and then plunges down on its prey with a velocity that the eye can scarcely follow. If unsuccessful, it returns to the bough and repeats the same process until it attains its object. Its powers of diving are by no means so great as those of the dipper, and I never saw one remain under water over three seconds at a time. The only notes I have ever heard the kingfisher utter are a sort of "chuck," and a peculiar indescribable sound resembling that made by a dog when retching. When emitting the latter note, the bird contracts the forepart of its body with a jerking motion. As I never heard this cry except in summer, and when the two birds were together, I concluded it was an amorous call, like those made by rooks in early spring.

A SISKIN, *Carduelis spinus*, was shot last month at a small pond surrounded with alders near Clockmill; and a WATER RAIL, *Rallus aquaticus*, among some reeds at Dunse Castle lake. The latter bird is not often met with, but I am told a few are seen every year in the pools and ditches in Dogden Moss.

*On Lepidoptera, taken mostly in 1873.*I.—*Preston.* By JOHN ANDERSON.

- VANESSA Io. A single specimen at Primrose-hill, in autumn, by a young collector.
 NUDARIA MUNDANA. Apparently common.
 NOLA CRISTULALIS. One.
 HYDRÆCIA NICITANS. One on thistle. Autumn.
 TÆNIOCAMPA RUBRICOSA. At sallow blossoms.
 ANCHOCHELIS RUFINA. About oaks.
 PLUSIA FESTUÆ. One.
 EPHYRA PUNCTARIA. Common on Marygold hills.
 HALIAS PRASINANA. Preston.
 HYBERNIA AURANTIARIA and DEFOLIARIA. One of each. Autumn.

My brother captured :—

- AGRIOPUS APRILINA. Preston.
 EUPLEXIA LUCIPARA. One, Broomhouse.
 PLUSIA BRACTEA. One, Broomhouse.
 ENNOMOS TILIARIA. Preston.
 EUBOLIA CERVINARIA. One from caterpillar, and others flying at Broomhouse.

II.—*Lauderdale, &c.* By ANDREW KELLY.

- VANESSA ANTIOPA. Mr. Walter Simpson captured this butterfly thirty years ago in Standalone plantation, and it is still in his cabinet, noways faded. In 1872 mine was taken in the same wood.
 SATYRUS MEGÆRA. Taken by the same gentleman several years ago, flying swiftly about the hedgerows near Lauder; subsequently it has not been seen.
 VANESSA Io. Several specimens have been taken in the outskirts of Allanbank plantations, Lauder. In the winter of 1852 or 3, Mr. Simpson found this butterfly hybernating under the bark of a tree in Standalone.
 LITHOSIA QUADRA. Only one capture has been made of this singularly rare insect by an Ayton collector (Mr. Thomas Renton). It was sipping the moisture oozing from the tanpits. New to Scotland.
 ACRONYCTA LEPORINA. Local, Dunse Law. Mr. D. Paterson.
 „ LYGUSTRI. At sugar, Hawick. Mr. Turnbull. Notrare.
 HYDRÆCIA NICITANS. Alynehead bog, on Lauder Common, very plentiful. I noticed about a dozen males assembled round a female.
 CHARÆAS GRAMINIS. Longcroft Braid Bog. There is here an area of twenty or thirty acres choke full of the caterpillars of this destructive insect.

- PLUSIA BRACTEA*. A perfect gem, and rare; Cleekhimin garden: very fond of settling on Sweet Williams.
- MAMESTRA ABJECTA*. I succeeded in boxing three or four specimens in Addinstone policy. It is not recorded in the "Perth Fauna."
- CLOSTERA RECLUSA*. Hawick. Mr. Turnbull.
- CELÆNA HAWORTHII*. There is a flourishing colony in a very bleak bog at the foot of Hog's law, where its food plant is very abundant.
- NOTODONTA DICTÆA*. One sheltering during a strong wind on a poplar tree near the Luggy, Lauder.
- „ *DICTÆOIDES*. Hawick. Mr. Turnbull.
- DICRANURA FURCULA*. One caught at rest among sallows; Thirlestane Castle.
- PLATYPTERYX FALCULA*. One, Dunse Castle. Mr. Paterson.
- APAMEA GEMMA*. Addinstone; not very rare.
- NEMEOPHILA PLANTAGINIS*. Top of Edgarhope wood amongst long heath. This was long a thriving station for Wood Tigers, but now they seem to have deserted it. Mr. Ferguson found it in Dogden Moss.
- EUCHELIA JACOBÆÆ*. One in the vale of the Leader, near Thirlestane Castle, some years ago.
- SATURNIA PAVONIA-MINOR*. All over the Lammermoors.
- NOCTUA TRIANGULUM*. Dunse Castle, very rare. Mr. Paterson.
- HADENA PISI*. Addinstone policy, rare.
- „ *DENTINA*. Ditto.
- HIMERA PENNARIA*. At gas-lamps, Dunse.
- BOARMIA REPANDATA*. In policies, plentiful.
- GEOMETRA PAPILIONARIA*. Near Hawick. Mr. Turnbull.
- STRENIA CLATHRATA*. Ditto.
- LARENTIA CÆSIATA*. Hills, plentiful.
- EMMELESIA DECOLORATA*. East Waters (Lauder).
- ANTICLEA BADIATA*. One; Addinstone.
- CIDARIA CORYLATA*. East Waters.
- „ *SILACEATA*. Ditto.
- „ *POPULATA*. Longcroft Moors.
- ANAITIS PLAGIATA*. Ditto.
- CHESIAS SPARTIATA*. Garden, Cleekhimin.

III.—*Eyemouth*. By WILLIAM SHAW.

- SMERINTHUS POPULI*. Not common.
- ACHERONTIA ATROPOS*. Rare.
- SPHINX CONVULVULI*. Rare.
- CHÆROCAMPA CELERIO*. Rare.
- „ *PORCELLUS*. Not common.
- MACROGLOSSA STELLATARUM*. Not common.
- HEPIALUS SYLVINUS*. Not common.

- NUDARIA MUNDANA. Not common.
 SETINA IRRORELLA. Local.
 CHELONIA PLANTAGINIS. Not common.
 ARCTIA FULIGINOSA. Not common.
 ORGYA ANTIQUA. Rare.
 PÆCILOCAMPA POPULI. Ayton, rare. S. Buglass.
 SATURNIA CARPINI. Not common.
 ELLOPIA FASCIARA. Not common.
 SELENIA ILLUNARIA. Not common.
 „ LUNARIA. Not common.
 CROCALLIS ELINGUARIA. Rare.
 HIMERA PENNARIA. Rare.
 PHIGALIA PILOSARIA. Not rare.
 GNOPHOS OBSCURATA. Rare.
 ACIDALIA REMUTATA. Rare variety.
 LOMASPILIS MARGINATA. Local.
 HYBERNIA LEUCOPHEARIA. Dunse. Mr. D. Paterson.
 „ DEFOLIARIA. Rare.
 ANISOPTERYX ÆSCULARIA. Not common.
 OPORABIA DILUTATA. Rare.
 THERA OBELISCATA (?) Rare.
 „ FIRMATA. Rare.
 MELANTHIA RUBIGINATA. Rare.
 CIDARIA PSITTACATA. Rare.
 „ SUFFUMATA. Not common.
 „ SILACEATA. Not common.
 „ PYRALIATA. Not uncommon.
 PELURGA COMITATA. Not common.
 EUBOLIA CERVINARIA. Local.
 „ PALUMBARIA. Not common.
 DICRANURA VINULA. Not common.
 NOTODONTA CAMELINA. Not common.
 THYATIRA BATIS. Rare.
 BRYOPHILA PERLA. Rare.
 ACRONYCTA PSI. Not common.
 LEUCANIA LITHARGYRIA. Rare.
 „ COMMA. Rare.
 HYDRÆCIA MICACEA. Not common.
 XYGLOPHASIA LITHOXYLEA. Not common.
 CHARÆAS GRAMINIS. Not common.
 LUPERINA TESTACEA. Not common.
 MAMESTRA FURVA. Not common.
 MIANA STRIGILIS. Not common.
 „ LITEROSA. Not common.
 CARADRINA BLANDA. Not common.
 AGROTIS SUFFUSA. Rare.
 „ SEGETUM. Common.

- AGROTIS EXCLAMATIONIS. Not so common.
 „ CORTICEA. Rare.
 „ LUCERNEA. Not common.
 TRIPHÆNA FIMBRIA. Rare.
 NOCTUA TRIANGULUM. Rare.
 „ CONFLUA. Moors. Rare.
 „ BAJA. Not common.
 ORTHOSIA LOTA. Not common.
 „ MACILENTA. Not common.
 ANCHOCHELIS LITURA. Not common.
 XANTHIA SILAGO. Ayton. S. Buglass.
 CIRRHÆDIA XERAMPELINA. Rare.
 COSMIA TRAPEZINA. Not common.
 DIANTHÆCIA CARPOPHAGA. Not common.
 „ CAPSINCOLA. Common, but local.
 „ CONSPERSA. Not common; very local.
 MISELIA OXYACANTHÆ. Not common.
 PHLOGOPHIRA METICULOSA. Not uncommon.
 APLECTA HERBIDA. Rare.
 HADENA THALASSINA. Not common.
 CUOULLIA UMBRATICA. Not common.
 ABROSTOLA URTICÆ. Not common.
 „ TRIPLASIA. Rare.
 GONOPTERA LIBATRIX. Not common.
 AMPHIPYRIA TRAGOPONIS. Not uncommon.
 MANIA TYPICA. Not uncommon.
 „ MAURA. Not uncommon.

Habitats for some Berwickshire Plants. By ANDREW KELLY.

- RANUNCULUS ARVENSIS. Field not far from Paxton.
 HELLEBORUS VIRIDIS. Allanbank woods. Introduced.
 CORYDALIS SOLIDA. Allanbank policy. Introduced.
 LEPIDIUM SMITHII. Longcroft-water, all over the haughs, and for miles along the side of the Leader.
 HONCKENYA PELOIDES. Longcroft burn, where it begins to turn wild. Introduced.
 GERANIUM LUCIDUM. Blackadder woods; Hartside Dean, at the back of the cottages.
 „ PHÆUM. Watchlaw, Whitsome road. Mr. Ferguson. Introduced.
 „ STRIATUM. In a ditch opposite Allanbank garden.
 SANGUISORBA OFFICINALIS. Road-side near Horsely hill, Hawick. Abundant. R.
 LYTHRUM SALICARIA. Craigswall bog.—J. Ferguson. Burn above Preston dam-head.—J. Anderson.

Sium latifolium. Ditch on the haugh opposite Whitehall, right hand side in going down.

Cnicus heterophyllus. High banks opposite Ninewells.

Campanula latifolia. Above Allanton bridge.—J. Ferguson, 1862.

Gentiana campestris. Lauder Common; in some places the old lea is perfectly purpled with it.

Mimulus guttatus. In a remote spot on the south side of Soonhope water, near to its junction with the Whelplaw burn; established before 1844. Another station near Blainslie, equally old and plentiful; about six miles further south. Unknown how introduced.

„ *luteus* In some abundance about Blainslie; but latterly it has become rare. Introduced.

Galeopsis versicolor. This beautiful nettle grows everywhere abundant in the cultivated grounds throughout Lauderdale.

Trientalis europæa. Abundant among heath on Hartside.

Statice armeria. Steep precipice running into Whiteadder opposite Ninewells.—J. Ferguson.

Epipactis latifolia. Standalone cover, only stray plants.

Habenaria viridis. Old lea at Muircleugh, Lauder.

Convallaria multiflora. Apparently indigenous in an oak wood at Whitmire.—J. Ferguson.

Lilium martagon. Stragglers throughout most of the woods near Thirlestane Castle. Introduced.

Zannichellia palustris. Bed of the Whitadder opposite Whitehall, left hand side in going down.

Typha latifolia. Cane pond, plentiful.

Blysmus compressus. Leader vale, Thirlestane Castle, very plentiful.

Scirpus sylvaticus. Ditches, at Tempest-bank.

Carex paniculata. Banks of the Adder, Broomdyke side, plentiful.

„ *teretiusecula*. Cane pond, Stuartslaw, plentiful; Longmuir moss, acres of it.

„ *sylvatica*. Blackadder woods; East Waters, Lauder.

„ *remota*. Moist places, Pistol plantations.

Poa nemoralis. Blackadder woods, common; Thirlestane Castle.

Cistopteris fragilis. Bank of the East Waters, above the bridge; banks of the Leader, Carolside.

Asplenium ruta-muraria. Spottiswood plantations, on a limestone dyke, abundant.

Scolopendrium vulgare. Pistol plantations, near the cottage.

Ophioglossum vulgatum. Lauder Common, over an area of several acres. Found by Mr. Ferguson, in the Pistol plantation near Broomdykes tile-works.

Botrychium lunaria. Lauder Common, very abundant.

Miscellanea.

BOHEMIAN WAXWING.—A beautiful male specimen was shot about a mile north of Dunse, Feb., 1873.—CHAS. WATSON. Another male was caught on the estate of Rodono, Selkirkshire; and a third was shot in Fifeshire from amongst a flock of Greenfinches.—“Kelso Chronicle,” Feb. 28, 1873.

RUFF (*Tringa littorea*).—A female was shot near Burnmouth, Oct., 1873. It was stuffed by Robert Wait, Dunse.—CHARLES WATSON.

FOOD OF THE HERON.—During the Christmas holidays, while dissecting a Heron, I found a shrew-mouse in its crop.—J. A. ERSKINE STUART.

GOSSANDER.—A pair shot on the Whitadder at Preston in 1872.—JOHN ANDERSON.

SQUIRRELS DIVERTING THEMSELVES WITH AGARICS.—I have never observed any notice of the fondness of Squirrels for the beautiful red fungi (*Agaricus muscarius*) that grow in the woods. I have watched several years to see if they eat them, but none that I saw appeared to be touched, after being put up into trees. They seem not to be put up accidentally, being placed in the fork of a branch with the stalk down, like an umbrella set up to dry.—IBID.

HABITS OF WASPS.—John Johnston gave me an instance of what looked like a sort of reasoning power in Wasps. One day he was struck by what looked like the strange flight of a large white garden butterfly against a breeze of wind. It turned out to be a Wasp carrying it off as a victim, but as it could make no headway, it sat down and clipped off the wings, and having thus lowered sail, resumed its journey without let.—IBID. I once noticed a Wasp on hazel leaves capture the brown leaf weevil (*Polydrusus micans*), whose bulk consists very much of wings and wing-covers. These it cleverly snipped off, and flew off with the remainder. A Wasp was seen to alight on a bank where several solitary bees were basking. It beheaded four of them, and took one of them away in its clutches. In carrying off a hive-bee, Wasps cut it into sections; but sometimes they content themselves with ripping a hole in the abdomen over the honey-bag, and extract its contents.—J. HARDY.

FOOD OF OCYPUS CUPREUS.—In autumn, I saw a female of this Staphylinid dragging a queen *Formica umbrata* by the neck, among some rocks in the dean above Akeld. It

appeared to be in search of some chink, into which it could enter to devour it. Its association with ant's nests appears to be predatory.—IBID.

LIME-GALLS.—August 5. Dr. Douglas sent from Kelso a leaf of Lime-tree, sprinkled over the upper surface with projecting spindle-shaped brown galls. Several of them are crooked, and they are all curved at the tips. They open from pale pubescent specks on the underside of the leaf. There is nothing inside the galls but a fluffy fibrous tissue. The galls are produced by families of young mites, and are analogous to those minute short-stalked leaf-galls seen on the sloe and bird-cherry. Mr. F. Walker, in noticing the Lime-gall in the "Entomologist" for February, 1874, says, "it is uncertain whether this *Acarus*, or mite, is identical with one or other of two kinds of mites which often occur under lime-leaves—the green *Tetranychus Tiliarum*, and the little white *Acarus*, which transfers to itself the hollow remnants of the Aphides, whose contents have been already appropriated by the Aphidii." It was more than usually plentiful at Kelso, in 1873.—IBID.

ORCHIS MASCULA, var. *Flor. alb.*—In profusion, growing in strong clay in Fishwick Mains dean; very rare, according to Professor Balfour. This is a perfect gem, and worth going to see in the third week in May.—C. STUART, M.D.

O. INCARNATA, *L.*—This, which is considered a good species on the Continent, and described in Prof. Babington's "Manual," but without any recognition of its distribution on the Borders, I have long been familiar with as growing in the peaty marshes in the bogs on Coldingham Moor. It also occurs in the bog at Spindleston, near the pond; but it is not alluded to in the "New Flora." Mr. G. C. A. Stewart, many years since, gathered it near Melrose.—J. HARDY.

SCUTELLARIA GALERICULATA.—In a bog at the foot of Yevinger Bell; said to be rare in that quarter.

CREPIS SUCCISÆFOLIA. Wooded banks of Wooler water, above Old Langlee.

CARDUUS HETEROPHYLLUS.—In the meadows near the mouth of the Pebble Burn. IBID.

On Poa Sudetica as a British Plant. By ANDREW BROTHERSTON.

THE broad, shining, peculiar green leaves first attracted my attention in the spring of 1872. In June following I got it in flower; but not having any description of it, I sent a specimen to Professor Babington, who determined it to be *Poa Sudetica*. This habitat was not satisfactory, being within private grounds; but from the appearance of the plants, and an indistinct recollection that I had seen it somewhere else, before I began to study the grasses, and also from its geographical distribution on the Continent, I thought it not unlikely that it might be found truly wild in Scotland. So I sent a notice to the "Scottish Naturalist," ii., p. 32, in hopes that some one else had picked it up. Next season (1873) I kept a look out for it in suitable places, and was rewarded by observing it in considerable plenty in Springwood Park woods (May 13th, 1873), to all appearances truly wild. It was growing there on a steep bank under old trees. Being at Newtondon in September for specimens of *Veronica peregrina* and *Chenopodium polyspermum*, I saw a bank covered with it. About the same time (September) Mr. Kelly—who had seen the notice in the "Scot. Nat."—sent me a specimen saying, "that if it was *P. Sudetica*, it was abundant in Blackadder plantations." It is also *plentiful* in the wooded bank at Pinnacle Hill, Kelso, and I observed a few plants in the Rabbit-braes plantation (Hendersyde).

Besides the above stations, where, I believe, it is truly wild, as *none* of them were ever under cultivation, being *too steep*, and also from the age (150 or 200 (?) years), of some of the trees it is growing under, which would be there before any of the grasses were cultivated in this country, I have seen it in several others which had been under cultivation at some time or other. But it does not affect the same sort of habitat as our introduced plants. I have never seen it in a *field* or on *road-sides*, and any plants that are near the river are above water-mark, whereas the "wool" and other introductions are generally on the gravelly spots liable to be flooded, or about the sides of roads and footpaths, to which the gravel has been taken.

The best time to look for this plant is during winter or spring, when the root leaves can be seen; when once known

it is very easily detected whether it is in flower or not. When in flower it may be passed by as *P. trivialis*, to which the panicle has a slight resemblance, if growing thickly amongst other plants, so that the root leaves are hidden; but a glance at the stems will at once show the difference, the sheaths being *strongly two-edged*.

It will grow and thrive where very few other grasses will live. At Springwood, *Poa nemoralis* grows along with it. At Pinnacle Hill, *Poa nemoralis*, *Milium effusum*, and *Bromus asper*, and at the Rabbit braes, *Bromus asper*, *Triticum caninum*, and *Brachypodium sylvaticum*, are its only companions that seem to be at home. *Veronica montana* grows along with it, both at Pinnacle Hill and the Rabbit-braes plantation.

Berwickshire another station for Poa Sudetica, Haenke.

By ANDREW KELLY.

THERE is no stint of this grass in Blackadder woods; it grows everywhere abundant in isolated tufts, and in larger patches where circumstances are particularly favourable. I noticed it as early as 1863, but not being able to refer it to any of the existing species of *Poa* then recorded in our Floras, I naturally conjectured that it was a cultivated species, and that the smashed and tufty appearance of the habitat was attributable in some way to clumsy tilling previous to the planting of the wood. Subsequently, however, in 1873, I had an opportunity of examining a description of this *Poa*; also, Mr. A. Brotherston's hints in the "S. Naturalist" of *Poa Sudetica*. From these I at once found that my *Poa* could be no other than *Sudetica*; but not resting satisfied with my own discrimination, specimens of it were sent to Mr. Brotherston, its original finder, who at once identified it. The approach to Blackadder house passes through some large tufts of this grass.

Remarks on Poa Sudetica. By JAMES HARDY.

THE habitat assigned by Willdenow ("Enumeratio Plantarum Hort. Reg. Bot. Berolinensis," p. 106) to this fine grass, is "in the marshy, wooded, moist, and rocky places of Germany,

Silesia, Bohemia, Moravia, Styria, and the Tyrol." The only "British Flora" in which its characters are given is that by the late Mr. Alexander Irvine, of Chelsea. Its recorded station is "in the ground of the Royal Hospital, Chelsea, June and July. This grass was first observed in 1851, but it had the appearance of being well established for years prior to that date." A copy of Mr. Irvine's description may perhaps enable members of the Club to identify this grass in other portions of the district :—

"Roots perennial and creeping. Stems erect, smooth, striated, somewhat compressed; with stolons and barren shoots at the base. Root-leaves tufted, numerous, broad, short, with abrupt points. Stem leaves long, flaccid, linear; keeled very rough; ligule very short, truncate, almost obsolete. Panicle large, rather close, the lowermost branches drooping. Spikelets ovate, numerous, compressed, four to five flowered; florets strongly nerved and without the web of hairs connecting their bases."

Mr. Brotherston has furnished me with excellent specimens of this grass, which I have compared with the descriptions of Schrader, Willdenow, &c. The sheaths of the leaves are sharpish two-edged; the leaves slope together at the points; the panicle is equally spread; the spikes are ovate-lanceolate; the florets are pointed; the stem rigid. There is a pretty contrast between the bright green spikes, and the white edges of the florets, giving a variegated aspect to the panicle; also, between the faded nankeen-yellow of the external leaves, the paler green stem, and the darker fresh leaves. There is a variety with hairs at the base of the florets. The short leaves remind one of *P. pratensis*, of which a state has been mistaken for *P. Sudetica*. Decandolle makes two varieties: 1, *rubens*, 2, *viridis*; and both have been ranked as species. *Poa Sudetica* has about a dozen synonyms.

QUEEN ETHELSWITH'S RING. — The statement in the "Athenæum," quoted in the President's Address is not quite correct. The Rev. W. Greenwell writes that "it was found somewhere between Sherburn and Aberford in the West Riding of Yorkshire, but I have not yet got the precise locality." (March 8, 1874).

Zoological Notes, 1873. By ANDREW BROTHERSTON.

TENGMALM'S OWL (*Strix Tengmalmi*).—There was an immature female of this rare British bird caught by a fisherman at Greenses Harbour, Berwick, on February 4th, 1873. It was kept alive till the 8th, when it died. Naturalists differ as to which is the longest feather in the wing of this species. The following are the relative lengths of the primaries in this specimen:—The third is the longest; the fourth one-tenth of an inch shorter; the second one-fourth; the fifth three-eighths; the sixth three-fourths; the first and eighth are equal, being one inch and three-eighths shorter than the third. Length, ten inches; expanse of wings, one foot nine-and-a-half inches. The Little Owl (*Strix passerina*) is the only British bird which this has any chance of being mistaken for; both being about the same size and colour. The most apparent difference is the covering of the legs and feet: in *S. Tengmalmi* they are thickly clothed with soft downy feathers; in *S. passerina* with short hairy ones. (Now in the Berwick museum.)

OSPREY (*Pandion haliaëtus*).—A very fine specimen of the Osprey was shot on the 24th of May, 1873, by Mr. John Wood, near the Tweed, in front of Floors Castle. It was a female in perfect plumage, and very fat. It weighed $3\frac{1}{2}$ lb.; length, $23\frac{1}{2}$ inches; expanse of wings, 65 inches. It had not been nesting, and had no appearance of doing so; the largest eggs in the ovary being about the size of No. 5 shot. It is stated of this and several other birds of prey, when breeding, that if one of them is shot the other gets a fresh mate in a very short time. May it not be such as this that supply their places? It had been in this district about nine days before it was shot. Mr. Vost informed me a week before that he had seen an "eagle" flying from the direction of Newtondon across to Floors, carrying something in its feet; and Mr. C. Lang, after he had seen the preserved bird, said that he had seen the same bird coming up the Tweed past Sprouston, and that it "smashed itself into the water." (Now in the Duke of Roxburgh's museum.)

DOTTEREL (*Charadrius morinellus*).—An adult male in summer plumage was shot about the middle of May, 1873, near Morebattle, on the outskirts of the Cheviots.

POCHARD (*Anas ferina*).—One of these "winter visitors," a male, was shot on a pond near Frogden, June 13th, 1873.

This is a not uncommon bird on the Tweed; also, on Yetholm and Hoselaw Lochs, during winter. Fleming says, "a winter visitant of the sea-coast." [Mr. Gregson has shot the Pochard duck in the Till, near Weetwood, Northumberland.]

SHORT-EARED OWL (*Strix brachyotos*).—A young bird was got near Spylaw, on the 26th of July, 1873. This is a migratory species, arriving in October and departing in March, although stragglers occasionally remain to breed in this country. I believe this specimen was bred in the district. Almost the whole face was a dusky black, instead of a broad circle of that colour round the eyes as in the adult bird.

WHITE WATER RAT (*Arvicola amphibia*).—One was caught by a shepherd's dog in Heatherhope burn, near Hownam, on the 21st of June. It was a pure white, and had red eyes; not like the so-called white mole, which is usually of a reddish or yellow shade. This variety of the mole is frequent. I have had them from many places in the district; but they appear to be more plentiful about Lintlaw than elsewhere, as Mr. H. Paterson, mole-catcher, Ednam, caught fifteen there during one season. I remember of seven full grown ones being caught within one week in a "mossy" field near Sprouston.

VARIETY OF HEDGE-SPARROW (*Accentor modularis*).—There was a very peculiarly coloured Hedge-Sparrow found dead at Bowhill, September 16th, 1873. The under parts were white, with a few dark spots on the breast, and all the upper side—except the tail, which was the usual colour—was light coloured.

PUFFIN (*Mormon fratercula*).—On the 4th of August, 1873, there was one caught in the Kale, near Grahamslaw; rather an odd place for a true sea-bird to be found, although I have seen similar instances, viz.:—A LITTLE AUK (*Uria minor*), in Hendersyde Park wood; a STORMY PETREL at Stichill; and an immature RINGED GUILLEMOT (*Uria lachrymans*), below Teviot Bridge, September 20th, 1869. It is not a rare occurrence, also, to see KITTIWAKES inland in winter. In December, 1872, one was shot on the Tweed at Sharpitlaw mill; and in the end of January, 1873, one was caught in the Teviot at Nisbet. About the same period another was killed at the Shaws, at the base of Carter Fell, and several other instances have come under notice; almost

all the specimens I have got here being during the winter.

SPOTTED CRAKE (*Crex porzana*).—J. S. Dudgeon, Esq., shot an adult female at Greenknowe, near Gordon, October 18th, 1873. The only other specimen I have seen in the district was got at Graden, October 19th, 1868. Query, were these birds here all the summer, or were they migrating southwards, the middle of October being the usual time of migration? (Now in Kelso museum.)

BIRDS THAT ARE INCREASING.—The Water Rail (*Rallus aquaticus*) appears to be increasing in the district, although its favourite haunts are decreasing. It is not an uncommon species, but on account of its shy, retiring habits it is seldom seen. Another bird that is getting more plentiful in this neighbourhood is the Barn Owl (*Strix flammea*). They used to breed in the Abbey, but they left it when it was being repaired six years ago, and have not yet returned. I believe the jackdaws have taken possession of their old quarters, but they have made the most of their altered circumstances, and have taken to building in hollow trees. "The white owl builds its nest for the most part in old and deserted, as well as in existing buildings and ruins, chimneys, eaves, or mouldering crevices, barns, dove-cots, church steeples, pigeon lofts, and, but very rarely, in hollow trees." (Morris's "British Birds," i., 212.) This owl has sometimes a very late brood. I saw two young ones that were taken from the nest, October 6th, 1873. And I have seen them later with the "Paddy down" on them. Mr. R. Christison, in November last, wishing to take one alive, baited a trap with a mouse, and placed it high up on a tree which was frequented by these birds. In the morning the trap was sprung, but instead of an owl it held a rat, which upon examination appeared to have been killed by an owl. The owl must have had the rat in its claws when it tried to get the mouse; but, by being too greedy, it lost both, but kept its liberty. The Kingfishers are also getting more numerous; but they must have many enemies besides man, else they would be much more plentiful than they are.

ERMINE (*Mustela erminea*).—Mr. Hewitson, Southfield, caught one at Sunlaws hill, in a mole trap, on the 10th of December, 1873. Owing to the mild season, the change to its winter dress was far from complete. Would it be pursuing the moles for food, or merely using the runs for winter quarters? The Ermine, and likewise the common

Weasel, are now almost exterminated in this district, and accordingly rats, mice, &c., their natural prey, are becoming more numerous. When so many protective laws are made for birds (many of which do not require anything of the sort, especially the small ones, since their natural enemy, the sparrow hawk, is destroyed on every opportunity), there ought also to be something of the same kind done for weasels and stoats. Although they may sometimes take a rabbit or a hare, the number of destructive vermin destroyed by them will much more than counterbalance anything in the shape of game they kill.

FOOD OF THE MOUNTAIN FINCH (*Fringilla montifringilla*).—I can confirm the statement made at p. 427, "Proc.," 1872, that this bird feeds on the beech mast. "Cock of the North" is the local name for it here.

HONEY BUZZARD.—At p. 322 of last year's "Proceedings" it is stated that there was a Honey Buzzard killed at Newtondon in May, 1867; and at p. 435, another shot May 22nd, 1865. This is apt to mislead. They both refer to the same bird, the latter being the correct date.

List of Tweedside Plants, mostly of recent introduction.

By ANDREW BROTHERSTON.

ALL the plants in the following list, except *Potamogeton flabellatus* (?) and, perhaps, the *Chenopodiums*, have most probably been introduced to this district. Those marked thus, * and possibly some of the others, have been brought with wool, the rest with farm and garden seeds. I am much obliged to Professor Thistleton Dyer, who determined most of the foreign species.

RANUNCULUS ARVENSIS (*L.*), var. INERMIS. Sparingly on cultivated ground, and Tweedside, Kelso. "A form not hitherto detected in Britain." (Professor Thistleton Dyer.)

FUMARIA MICRANTHA, *Lag.* Abundant in cornfields about Ednam.

- **NESLIA PANICULATA*, *Desv.* Tweedside, Kelso. (A weed in the brewery garden at Ednam, 1861.) Native of Europe generally.
- SILENE ANGLICA*, *L.* Introduced into many gardens last year (1873) with seeds of *Whittlavia glotinioides*. It has a good chance of establishing itself in the district, as it is a very free seeding plant.
- GYPHOPHILA MURALIS*, *L.* Knowes, Kelso.
- **ERODIUM CYGNORUM*, *Lees.* On heaps of rubbish below Gala-shiels. This appears to be the place mentioned in the "Proceedings," 1869, p. 77, where Mr. Stewart found *E. moschatum*, none of which I observed, July, 1873. This is easily distinguished from any of the British Storksills, by the colour of the flowers which are *blue*. It is a Swan River species, and has also been introduced into Yorkshire with Australian wool.
- **MEDICAGO FALCATA*, *L.* Sides of Gala, near its mouth.
- * " *PENTACYCLA*, *D. C.* Tweedside, Kelso. This plant resembles *M. denticulata*, but the pods are larger and have five turns to the spiral circles.
- **LATHYRUS SATIVUS*. Tweedside, Kelso. South of Europe.
- * " *ANGULATUS*. Do. Do.
- **TRIFOLIUM OCHROLEUCUM*, *L.* Mouth of Gala.
- **PARONYCHIA POLYGONIFOLIA*, *D. C.* Sides of Gala. Native of the Mediterranean region. Very like a *Herniaria*. May it not be the *Herniaria* mentioned by Mr. Stewart? "Proc.," 1869, p. 75.
- **CENTAUREA NAPIFOLIA*, *L.*, var. Tweedside, Kelso. (Barbary to Greece.)
- CUSCUTA EPITHYMUM*, *Murr.* "In a wide sense"; Haymount, in tares. This plant is intermediate between the usual *C. epithy-mum*, *Murr.*, and *C. Trifolii*, *Bab.*, approaching nearest to the latter.
- **ECHINOSPERMUM LAPPULA*, *Lehm.* Sides of Gala near its mouth. This very much resembles a *Myosotis*, but, like most of the "wool" plants, the seeds are enveloped in a spiny covering, while in *Myosotis* they are smooth. "Upon shingle, South-wold, Suffolk, and elsewhere near the sea; introduced." *Bab.*
- ELSHOLTZIA CRISTATA*. Stragglers in cultivated ground. Native of Siberia.
- **PLANTAGO VIRGINICA*, *L.* Near mouth of Gala. Native of America.
- CHENOPODIUM HYBRIDUM*, *L.* St. Leonards, Kelso.
- " *POLYSPERMUM*, *L.* Both varieties plentiful in a recently ploughed old pasture at Newtondon. Var. *acutifolium* most abundant.

LUZULA NIVEA, Desv. Occasionally in pastures in this neighbourhood, to which most probably it has been introduced with grass seeds.

POTAMOGETON FLABELLATUS (?) Bab. Yetholm Loch.

*FESTUCA AMBIGUA, Le Gall. Sides of Gala. There were many plants of this, July, 1873. From Mr. Stewart's paper I observe that *F. uniglumis* was not uncommon in the same district in 1868, none of which I picked up last year. There is very little chance of confounding these two species. The larger glume of *uniglumis* being about the same length as the lowest flower, while in *ambigua* it is about one-third; which was the proportion in the Gala plants.

*SERRAFALCUS PATULUS, Parn. Tweedside, Kelso.

* " SQUARROSUS, Parn. Gala, near mouth.

* " SECALINUS, Bab. Tweedside, from Edenmouth to Gala; plentiful, 1873. There were three very distinct varieties—with several intermediate forms—and all equally plentiful, viz.:—*Bromus secalinus* (Parnell, 49 and 121), *B. vulgaris* (Parnell, 122), and one *awnless* altogether. I can find no notice of this variety in any book that I have access to; but there is a very good drawing of it in Lowe's "Brit. Grasses," pl. liv., but the description is of the typical form.

LOLIUM TEMULENTUM, L., var. LONGIARISTATUM, Parn. Many plants in the bed of the Gala.

Besides the above which, so far as I am aware, are new to the district (excepting the typical *S. secalinus* and *Lolium temulentum*), I saw the following on the river side, in addition to those which were in my last year's list:—

*ERYSIMUM ORIENTALE, R. Br. From Kelso to Gala, and in a garden at Forest Field, Kelso.

*SINAPSIS NIGRA, L. Plentiful from Eden to Gala.

*RESEDA LUTEA, L. Near mouth of Gala.

*XANTHIUM SPINOSUM, L. Kelso to Gala.

*SETARIA VIRIDIS, Beauv. Do.

And several undetermined species.

The *Mimulus* named *M. guttatus* (?) in "Proceedings" for 1872, p. 439, is a spotted variety of *M. luteus*.

I have no doubt that by a careful search many more introduced plants could be picked up on Tweedside. Many of them have taken kindly with the change and are self-supporting, some of them displacing the aboriginal possessors of the soil; but a few of the more tender species require fresh importations of seed to keep up the stock, as they do not ripen their seed here.

On Insects of the East of Berwickshire. No. II. By JAMES HARDY.

THE following are the captures of 1873, and are in connexion with those recorded, Vol. vi., pp. 421-424. They will help to prepare the way for a more exact knowledge of the Entomology of the Eastern Borders; and can be gathered up afterwards in a more comprehensive form.

COLEOPTERA.

- BEMBIDIUM SCHUPPELI. Pool, sea side, foot of Pease burn.
 OCTHEBIUS BICOLON. Ditto.
 OXYPODA NIGRINA. Three examples along with *Ox. opaca* and *Ocalea castanea*, at sides of the same pool; July.
 HOMALOTA VESTITA. Along with *H. volans*, *H. graminicola*, *H. aquaticas*, and *H. fungi*, at same pool.
 „ JENEICOLLIS, VALIDA, and NIGRA. Decayed ferns, coast at Oldcambus; September.
 „ CINNAMOPTERA. Same locality.
 ALEOCHARA FUSCIPES. Sea-coast.
 QUEDIUS TEMPORALIS. In a cavern near Siccar and among decayed ferns, sea-coast. July-September.
 „ SEMIOBSCURUS. Side of pool, foot of Pease burn.
 „ ATTENUATUS. Near Oldcambus.
 HOMALIUM CONCINNUM. Numerous in dried pigeon's dung. Sea-cave, Swallow Craig.
 OXYTELUS FAIRMAIREI? Two; decayed ferns, sea-coast.
 MICROPEPLUS STAPHYLINOIDES. One; ditto.
 ANISOTOMA ROTUNDATUM. One; ditto.
 CHOLEVA GRANDICOLLIS. Sea-coast, one; and in Pease dean.
 „ VELOX and WATSONI. Decayed ferns, sea-coast; several.
 „ KIRBII. Dead bird, Siccar.
 „ NIGRICANS. Pease dean.
 CRYPTOPHAGUS SETULOSUS. One at Greenhaugh, below withered ferns; September.
 „ BICOLOR. In old pigeon dung in a sea-cavern; Swallow Craig.
 „ AFFINIS. Below withered Scurvy-grass, along with *C. vini* and *C. dentatus*. Sea-banks near Siccar. A large number flying about at the Bass Rock in July.
 ATOMARIA FUSCATA. Sea-coast.
 „ PUSILLA, ATRICAPILLA, and BEROLINENSIS. Below decayed ferns, near Greenheugh; one of each. September.
 TETRATOMA ANCORA. Beat from an oak in Penmanshiel wood in July.

- HELODES MARGINATUS and PALLIDUS. Oldcambus.
 CYPHON COARCTATUS. Ditto.
 TELEPHORUS LIMBATUS, MALTHINUS FLAVEOLUS, and MALTHODES MINIMUS. Penmanshiel wood.
 ANASPIS RUFILABRIS and RUFICOLLIS. Ditto.
 SALPINGUS ATER. Two from bushes, Pease dean.
 APION CERDO. Penmanshiel.
 CEUTHORHYNCHUS CYANNIPENNIS. Pease Dean.
 LIOPUS NEBULOSUS. Penmanshiel wood.
 PHYLLOTRETA NEMORUM. Dean, Oldcambus.
 THYAMIS BRUNNEA, LEVIS, MELANOCEPHALUS, and FUSCICOLLIS. Dean, Oldcambus.
 „ GRACILIS and FEMORALIS. One of each, dean at Oldcambus.
 PSYLIODES CHRYSOCEPHALA. Pease dean.
 EXOCHAMUS 4-PUSTULATUS. Furze, Pease dean.
 SCYDMENUS COLLARIS. One, sea-coast near Siccar.

HYMENOPTERA.

TENTHREDINIDÆ.

- CLADIUS DIFFORMIS, *Panz.* On a rose-leaf, Oldcambus.
 PRIOPHORUS IMMUNIS, *Steph.* Oldcambus, August.
 NEMATUS PROXIMUS, *St. Farg.* Penmanshiel, August.
 „ TERMINATUS, *St. Farg.* Two males, Oldcambus; August.
 „ MYOSOTIDIS, *Fab.* Bogs at Oldcambus and Penmanshiel; September.
 „ NIGRATUS, *Retz.* Ditto.
 ATHALIA ROSÆ, *L.* Sides of fields, &c. I have often observed that it swarms where *Ajuja reptans* grows; and even in a garden at Broxmouth Park it was crawling among the leaves of this plant. The larva lives on cruciferous plants. June-September.
 HEMICHROA LUTEIVENTRIS, *Fallen.* Larva on alder in Pease dean.
 SELANDRIA SERVA, *Fab.* Warm bank, dean, Oldcambus, in August.
 ALLANTUS ARCUATUS, *Forst.* Penmanshiel wood, &c.
 PACHYPTASIS RAPÆ, *L.* Penmanshiel wood, Tower dean, &c.
 TAXENUS BICOLOR, *Klug.* Oldcambus, August.
 STRONGYLOGASTER EBORINUS, *Klug.* Beat from oak, Penmanshiel wood, July.
 TENTHREDO SCUTELLARIS, *Fab.*=STIGMA, *Fall.*=AMBIGUA, *Klug.*
 =BREVISPIA, *Thoms.* Oldcambus, July.
 „ SCALARIS, *Klug.* Common.
 „ LIVIDA, *L.* Penmanshiel wood, July.
 „ BALTEATA, *Klug.* Ditto.

TENTHREDO RUFIVENTRIS, *Fab.* Both sexes. Penmanshiel wood, July.

EMPHYTUS PATELLATUS, *Klug.* Bog, Penmanshiel moor, July.
 „ GILVIPES, *Klug.* Bog, Oldcambus, August.

ICHNEUMONIDÆ.

CHELONUS OCLATOR. A curious rudely sculptured insect, as if it had come from a “prentice hand.” Among grass, dry banks, Oldcambus, August.

FORMICIDÆ.

MYRMICA SCABRINODIS. Penmanshiel.
 „ LOBICORNIS. Sea-coast.

FOSSORES.

CRABRO PODAGRICUS. Dean, Oldcambus.

APIDÆ.

SPHECODES EPHIPPIA. Warm banks, Oldcambus, August.

HALICTUS FLAVIPES and ÆRATUS. Ditto.

ANDRENA CINERARIA and MINUTULA. Ditto.

NOMADA BOREALIS. Among rocks, Winden dean, August.

„ FURVA. Roadside, Penmanshiel wood, July.

HEMIPTERA HETEROPTERA.

PENTATOMA BACCARUM. Banks near St. Helen's Church; near Grant's House, &c.

TROPICORIS RUFIPES. Dunglass dean.

PIEZODORUS LITURATUS. Common on furze.

ACANTHOSOMA GRISEUM. A few examples along with the next on birch, when leaves were dropping in November. Black Craig in Pease dean.

„ PICTUM. This pretty species was very numerous on birch and oak in Pease dean, at Black Craig, and also in Akieside; in November.

NYSIUS THYMI. Winden dean, August.

MONALOCORIS FILICIS. Woods, &c., Pease dean.

PITHANUS MARKELI. Among grass, common.

MIRIS HOLSATUS, RUFICORNIS, and CALCARATUS. Among grass, common.

LOPHOMORPHUS DOLOBRATUS. Among grass, and on moors.

PHYTOCORIS TILIÆ. On oak, Penmanshiel wood; Pease bridge; Tower dean. August–September.

DERÆOCORIS STRIATELLUS. Penmanshiel wood, on oaks.

„ BIPUNCTATUS. Penmanshiel and Oldcambus.

- DERÆOCORIS SEXGUTTATUS. Oaks, Penmanshiel wood.
 „ FERUGATUS. Penmanshiel, &c.
 „ FORNICATUS. One from oak, Oldcambus.
 LITOSOMA NASSATUS. Oldcambus.
 „ VIRIDINERVIS. Pease dean.
 ÆTIORHINUS ANGULATUS. Penmanshiel wood, Pease and Tower deans.
 SPHYRACEPHALUS AMBULANS. Pease dean, &c.
 „ ELEGANTULUS. Bog, sea-banks, Oldcambus.
 PHYLUS MELANOCEPHALUS. Numerous on oaks in Penmanshiel wood.
 „ CORYLI. Black var. Tower dean.
 CYLOCORIS HISTRIONICUS. On oaks, numerous in Penmanshiel wood, &c.
 IDOLOCORIS GLOBULIFER, *Fall.* Sea-coast, Oldcambus.
 „ PALLIDUS. Penmanshiel, August.
 MALACOCORIS CHLORIZANS. Pease dean, Penmanshiel.
 TERATOCORIS SAUNDERSI, *D. and S.*, “*Ent. Mag.*,” v., p. 260.
 Near Pease bridge, rare. A recent addition to the British Fauna.
 PLAGIOGNATHUS VIRIDULUS. Dean, Oldcambus, &c.
 „ ARBUSTORUM. Common.
 APOCREMNUS AMBIGUUS. Plentiful on birch, Penmanshiel; July.
 „ VARIABILIS. Several on birch, Penmanshiel, and on hazel, Oldcambus; July.
 „ OBSCURUS. On hazel, Penmanshiel wood; July.
 PSALLUS VARIANS. Oaks, Penmanshiel; July.
 „ LEPIDUS. Oaks and sloe, Oldcambus; July.
 HETEROCORDYLUS TIBIALIS. Dean, Oldcambus.
 RHOPALOTOMUS ATER. Ditto.
 CAPSUS SCUTELLARIS. Moor, Penmanshiel; dean, Oldcambus. August.
 CHARAGOCHILUS GYLLENHALLI. Dean, Oldcambus.
 ORTHOPS KALMI. Penmanshiel, sea-coast and dean, Oldcambus.
 „ CERVINUS. Beat from hazel and ash, Pease dean; Nov.
 „ PASTINACÆ. Not uncommon.
 LYGUS SPINOLÆ. Two, Penmanshiel wood.
 „ CONTAMINATUS. Pease dean, &c.
 „ CAMPESTRIS. Grey variety, Pease dean, &c.
 STIPHROSOMA LEUCOCEPHALA. Two from Winden dean, and two from bog, Oldcambus. Rare.
 TEMNOSTETHUS NEMORALIS, *Fab.* From fir-trees in November, Tower dean.
 ANTHOCORIS AUSTRIACUS. Dean, Oldcambus.
 NAPIS APTERUS and LIMBATUS. Oldcambus, &c.
 SALDA SALTATORIA. Common.
 „ LITTORALIS. Pool at sea-side, foot of Pease burn; July.

HEMIPTERA HOMOPTERA.

- CIXIUS NERVOSUS. On bushes as late as November.
 ,, CONTAMINATUS. Plentiful on bushes in Penmanshiel wood,
 LIBURNIA LIMBATA. Bog, Oldcambus.
 SKIROMA ALBOMARGINATA. Bog, sea-coast.
 PTYELUS EXCLAMATIONIS. Oldcambus and Penmanshiel moor.
 PHILENUS SPUMARIUS. "Cuckoo spit."
 IDIOCERUS CONFUSUS, *Flor.* From willows, Pease dean, in November.
 BYTHOSCOPI ALNI and FRUTICOLUS. Pease dean, &c.
 MACROPSIS LANIO. Oak, Penmanshiel wood.
 AGALLIA VENOSA. Sea-banks, Oldcambus, and Tower dean.
 ACOCEPHALUS RUSTICUS, RIVULARIS, and AGRESTIS. Banks, Oldcambus, &c.
 ATHYSANUS PRASINUS. Two, sea-banks, Oldcambus.
 ,, SUBFUSCULUS. On foliage of oak and hazel, Penmanshiel wood, &c.
 THAMNOTETTIX QUADRINOTATA. Bogs at Oldcambus and Penmanshiel.
 ,, VIRESCENS. Sea-banks.
 ,, INTERMEDIA. One, Winden dean.
 ,, MELANOPSIS. Bare grassy spots in Penmanshiel wood.
 ALLYGUS MIXTUS. Pease dean.
 DELTOCEPHALUS PASCUELLUS. On *Scirpus palustris*, pool at foot of Pease burn.
 ,, PUNCTUM. Tower dean, November.
 ,, STRIATUS. Ditto.
 NOTUS CITRINELLUS. Grass, Tower dean, and sea-coast. A peculiar variety of the colour of decayed grass leaves, found in November.
 ALEBRO ALBOSTRIELLA. Tower dean, one.
 CHLORITA FLAVESCENS and VIRIDULA. Tower dean, &c.
 KYBOS SMARGADALUS. Pease dean.
 TYPHLOCYBA PULCHELLA. Tower dean.
 ANOMIA SEXPUNCTATA, *Fall.* On birch and willow, two varieties. =10-PUNCTATA, *Fall.*, and 6-NOTATA, *Curt.* Pease dean, Nov.
 ,, NITIDULA, *Fab.* On hazel, Black Craig, Pease dean; November.
 ,, ULMI and GEOMETRICA. Pease dean.

Memoir of Dr. T. C. Jerdon. By Sir WALTER ELLIOT,
K.C.S.I., F.L.S., Wolfelee.

WHEN the Club met at Cockburnspath in July last year, I had the satisfaction of proposing a member, whose scientific reputation would have added to the credit of the Club, while his biological knowledge would, I hoped, have enriched the pages of its Proceedings. These expectations were not destined to be realised. Elected at the annual meeting in September following, he died within nine months afterwards on the 12th of last June (1872).

Thomas Caverhill Jerdon, eldest son of the late Archibald Jerdon, of Bonjedward, was born on the 12th October, 1811, at Biddick House, in the county of Durham, where his mother was on a visit to her own family. His father, although not a scientific naturalist, was a diligent observer, and early imbued his sons (of whom the younger still ranks as one of the most active botanists of the Club) with habits of observation; thus implanting the germs of those pursuits which they afterwards prosecuted with such success.

He was educated first at Bishopton Grove, near Ripon, and subsequently at Bawtry, near Doncaster, where, and in the neighbourhood, the late Dr. P. Inchbald for many years conducted a school of some reputation in its day. In 1828, he entered the University of Edinburgh as a literary student, attending among other classes, Professor Jameson's lectures on natural history. On the 23rd June, 1829, he joined the Plinian Society*, an association of young naturalists who made occasional excursions during the session, meeting afterwards to discuss the results of their observations. In 1829-30, he matriculated as a medical student, and during that and the two following sessions attended the classes connected with the profession he had chosen. Repairing to London in 1834, he prosecuted his medical studies for upwards of a twelvemonth, until he obtained an assistant-surgeonship in the East India Company's service, on the establishment of Fort St. George. His appointment bears the date of 11th September, 1835, and he soon after sailed for India, arriving at Madras on the 21st February, 1836.

* A notice of this Society was given by Mr. Hardy in the President's Address of 1868 (Proc., v., 404), in which he refers for details to the "Life of the Rev. John Baird," its founder, and also one of the originators of the Berwickshire Club; and also to Professor Balfour's "Memoir of Dr. Coldstream." See too, Trans. Botanical Soc., Edinburgh, Vol. xi., p. 16.

A considerable force was at that time engaged in quelling disturbances in the Ganjam district, about half-way between Madras and Calcutta. The troops had suffered severely from fever and dysentery in the mountainous tracts to which the insurgents had retired, and a large number of medical officers were attached to the troops in consequence. As soon, therefore, as Jerdon had passed the probationary course in the General Hospital, to which all new comers are subjected, he was despatched to the scene of operations. He had thus an opportunity of seeing a part of the country difficult of access and rarely visited; and he did not neglect it, as his notices of the birds of the Eastern Ghauts subsequently showed. At the conclusion of the operations in Goomsoor, he was posted to the 2nd Light Cavalry on the 1st March, 1837. He joined the regiment at Trichinopoly, and marched with it to Jalnah, in the Dekhan. Cavalry regiments have generally two medical officers attached to them. He was thus enabled to make frequent excursions into different parts of the Table Land, and to accumulate materials for "*A Catalogue of the Birds of the Peninsula of India*," which appeared in successive numbers of the *Madras Journal of Literature and Science*, in 1839-40. The preface states that

"Until a very few years ago, we did not possess a single collective account of the birds of this vast country. In 1831, a catalogue of birds collected on the banks of the Ganges and in the Vindhian range of mountains, was published by Major Franklin in the *Proceedings of the Zoological Society of London*. This comprised 156 species, of which more than twenty were described for the first time. . . . In 1832, a catalogue of birds collected by Colonel Sykes in the Bombay Presidency was published in the same work. In this are enumerated 236 species. . . . During the short period I have been in this country, I have been fortunate enough to add a considerable number of species to the Indian fauna. . . . The total number of my catalogue is nearly 390*, which, however, includes ten of those of Sykes not hitherto obtained by me, and nearly as many more obtained by Mr. Walter Elliot, M.C.S., who has kindly placed his valuable notes on the birds procured by him at my disposal; by which, in addition to the new species added, I have been able to elucidate several doubtful points, to add some most interesting information on various birds, and to give the correct native names of most of the species enumerated by him."

After passing about four years with his regiment, he

* Enlarged to 420 by a supplement.

obtained leave of absence to visit the Nilagiri Hills, where he was married in July, 1841. Six months afterwards he was appointed Civil Surgeon of Nellore, but did not join that station till the middle of the following year, having in the meantime been placed in charge of the Government Dispensary at Madras.

The wilder parts of the country between Madras and Nellore are occupied by the Yanádis, a remarkable aboriginal tribe, of semi-nomade habits, subsisting on the spontaneous produce of the jungles, and possessing in consequence a minute acquaintance with the forms of animal and vegetable life around them. By their means Dr. Jerdon discovered many new species, particularly of Batrachian and other reptiles. To these he made large additions in after years, including many new snakes, and subsequently embodied them in a "Catalogue of Reptiles inhabiting Southern India," which was published in the Journal of the Asiatic Society of Bengal, in 1853. But it was professedly only "a brief and imperfect résumé" prepared from "his drawings, and of which detailed accounts would be drawn up as soon as he should again have access to his collection." Several years later (in 1870) he transmitted a farther paper to the same periodical entitled, "Notes on Indian Erpetology," in which he stated that "as some time would elapse before his work on the reptiles of India could be published, he thought it advisable to lay before the Society a short account of some recent discoveries," referring at the same time to the loss of the collections on which he had founded his former catalogue, but which he was in the course of replacing by fresh specimens.

The favor with which his Catalogue of Birds had been received, led him to commence a farther work on the same subject during his residence at Nellore, under the title of "Illustrations of Indian Ornithology," consisting of fifty colored figures of new or little-known species, with ample descriptions. The first number appeared at Madras in 1843, in two sizes, octavo and quarto, but the whole was not completed till 1847. The plates are remarkably well executed, and the figures depicted with much accuracy and spirit, some of them having been contributed by an amateur friend*. He contemplated the issue of a second series to complete a

* Mr. S. N. Ward, Madras Civil Service. The foliage and foregrounds were added by the late Captain S. Best, Madras Engineers.

"Century of Birds," but the difficulty of superintending the execution of the plates at a distance from the Presidency, and other obstacles, frustrated this design.

In addition to his zoological pursuits, he now began to occupy himself with botany, and acquired a very competent acquaintance with the Indian flora. But he never published any of the novelties he discovered, preferring to communicate them to those more directly engaged in botanical pursuits. One of them is thus described by Dr. Robert Wight, "I am indebted to Mr. Jerdon for this interesting little plant (*Jerdonia indica*, R. W.), which, as forming the type of a new genus, I have much pleasure in dedicating to the discoverer; an honour well merited by his extensive researches in all branches of organic natural history. Though botany is the last to which he has given his attention, it has already reaped considerable advantage from his energetic application to the study of plants."*

When he had been about two years at Nellore, he was transferred to the Presidency as Garrison Assistant-Surgeon of Fort St. George, on the 25th October, 1844. Here he entered on a new field. I had made a large collection of the fish of the Bay of Bengal, and when he acted at the Government Dispensary in 1842, we identified about three hundred species† of these by means of the "*Histoire des Poissons*, of Cuvier and Valenciennes, and Russell's *Coromandel Fishes*. He now added considerably to the list, and at the same time prosecuted his search after the less known fresh-water kinds, frequenting tanks and streams. A list of the latter, comprising 354 species, of which nearly one-third were new, was printed in the *Madras Journal* in 1848; followed in 1851, by a paper entitled "*Ichthyological Gleanings*," which, though somewhat meagre and imperfect, enumerated 420 salt-water species. About this time, also, he communicated to the same journal a "*Catalogue of the species of Ants found in South India*," many of which were new, "with the view," as he stated, "rather of stimulating others to record their observations, than under a sense of the value or completeness of the remarks contained in it," but which, nevertheless, affords the best descriptive account of this interesting family yet published.

* Wight, *Icones Plant., Ind. Or.*, Vol. iii., No. 1352.

† Most of these are now deposited in the Museum of the Archæological Society of Hawick.

When he had been about three and a half years at the Presidency, he applied for a medical charge in the western side of the Presidency, and was appointed Civil Surgeon of Tellicherry, on the 12th February, 1847. Here for nearly four years he investigated the fauna and flora of the great tropical forests that clothe the Malabar coast, abounding in forms peculiar to a region essentially different from the arid plains of the central table land, and even from those of the eastern jungles, which descend to the shores of the Bay of Bengal.

The prospect of attaining to the rank of surgeon, which would involve his return to military duty, induced him to resign his civil charge on the 3rd June, 1851. His promotion took place on the 29th February, 1852, and he was appointed to the 4th Light Cavalry, then in the Sagor and Nerbudda territory, with which he served during the mutiny of the Bengal army, where he saw some active service. Peace having been restored, he went to Darjeeling on sick leave for a twelvemonth, and made himself acquainted with many new forms peculiar to the Himalayan range. He then got himself appointed to a regiment in Burma (the 11th Native Infantry), and joining *via* Calcutta, lost no time in exploring this new field.

He had for some time projected the publication of a series of handbooks, or monographs of Indian zoology, and when passing through Calcutta he sought and obtained the patronage of Lord Canning to this undertaking, for the exercise of which a favorable opportunity soon afterwards offered. A mission to Tibet had been projected by the Government of India, to be conducted by Captain E. Smythe, and Jerdon was summoned from Burma in August of the same year to accompany it in the capacity of naturalist. The plan was frustrated by the difficulty of obtaining passports from Peking, to enable the party to cross the Chinese frontier; and meantime his services having been transferred permanently to the Government of India, Lord Canning was enabled to place him on special duty, for the publication of his proposed Manuals of the Vertebrata of India. He began with his favorite subject, Ornithology; the first volume of which, under the title of the "Birds of India," was published in Calcutta in 1862, followed by the second, in two parts, at intervals during 1863.

In these volumes are described 1,008 species (equal to the

number comprised in the avi-fauna of Europe), spread over an area extending from the watershed of the Himalayas on the north to Cape Comorin on the south, and from the Indus on the west to the Teesta and Brahmapootra rivers on the east, with brief notices of families and tribes not found in India, to serve as a compendium for naturalists scattered over that vast country, cut off, as they are, from books of reference and the means of investigating new forms.

Meantime the author, who had already "traversed and re-traversed the length and breadth of the continent of India," with the exception of its north-western portion, availed himself of the sanction given him to prosecute his researches in any quarter. During the next five or six years he visited the Punjab, Cashmere, all the hill stations of the great northern range, and explored the valley of the Sutlej, penetrating as far as Chini. The volume of *Mammalia* did not appear until 1867, although it had been printed the year before at the Roorkee press. It contains descriptions of 247 species, but is confessedly imperfect in some of its minuter details.

On the completion of this volume, he repaired to Darjeeling, where he occupied himself with the *Manuals of Reptiles and Fish* during the greater part of 1867-68. On the 28th February of the latter year he retired from the service; and having sent part of the MS. of the *Reptiles* to the press, he visited Assam and the Khasi Hills. Whilst at Gowahatty he was prostrated by a severe attack of fever, from which he never entirely recovered. As soon as he was convalescent he hastened to Calcutta, and soon after returned to England, where he arrived in June, 1870. His health continued to be very precarious. The first winter was passed at Torquay, the next at Mentone; but he never rallied, and died at Norwood, on the 12th June, 1872.

The following is a complete list of his writings, as far as I have been able to ascertain:—

1. *Catalogue of the Birds of the Peninsula of India*, 8vo. Madras: J. B. Pharaoh, 1839, pp. 203; having previously appeared at intervals in the *Madras Journal of Lit. and Sc.*, Vols. xi., xii., and xiii.
2. *Illustrations of Indian Ornithology*, containing fifty figures, chiefly from the South of India; 8vo. and 4to. Madras: Printed by P. R. Hunt, 1847. Not paged.
3. *On the Fresh-water Fishes of South India*.—*Madras Jour. of Lit. and Sc.*, Vol. xv., pp. 139 and 302. 1848.

4. A Catalogue of the Species of Ants found in South India.—Madras Jour. of Lit. and Sc., Vol. xvii., p. 103. 1851.
5. Ichthyological Gleanings in Madras.—Madras Jour. of Lit. and Sc., Vol. xvii., p. 128. 1851.
6. Catalogue of Reptiles inhabiting the Peninsula of India.—Journal Asiatic Soc. of Bengal, Vol. xxii., pp. 462 and 522. 1853.
7. The Birds of India; 2 Vols. in 3, 8vo. Calcutta: Vols. i. and ii., Mil. Asylum Press; Vol. iii., Wyman and Co. 1862-4.
8. Notice of some New Species of Birds from Upper Burmah.—Ibis, 1862, p. 19-23.
9. The Mammals of India, 8vo. Roorkee: Printed for the author by the Thomason College Press, 1867, pp. 319, with Appendix, pp. xv.
10. On *Phaenicopterus rubidus*.—Ibis, 1869, p. 230.
11. Notes on Indian Erpetology.—Proceedings Asiatic Soc. Bengal, 1870, p. 66.
12. On some New Species of Birds from the North-East Frontier.—Ibis, 1870, p. 59.
13. On two Species of *Phasianidæ*.—Ibis, 1870, p. 147.
14. Supplementary Notes to the Birds of India. — Ibis, 1871, pp. 234 and 335-336.
15. Ditto.—Ibis, 1872, pp. 1-22, 114-139, and 297-310.

The above bears testimony to his industry, and to the wide range of his biological pursuits. His favorite branch was ornithology, and being a keen sportsman, he pursued his researches as much in the field as in the house. Of a spare active form, with an imperturbable good temper, he cared neither for fatigue nor privations in his wanderings; and being gifted with the power of rapid and accurate discrimination, he could detect at a glance peculiarities of form or habit indicative of a difference of species, even in birds on the wing. If he had recorded his observations methodically as they were made, he would have accumulated a store of facts of the highest value. Instead of this, it was his practice merely to figure every species, both those captured by himself and those already depicted by others, for which purpose he generally retained the services of a native draughtsman; or, on emergencies, made rough tinted or pencil sketches himself. On these, which were of uniform octavo size, he noted a few particulars of measurement, habitat, &c., and trusted to a retentive memory for details. But such materials were insufficient for that exact definition of characters on which a genus or a species can be recognised and accepted. Hence his lists are often found to be

defective because prepared from the figures alone, when his type specimens were out of reach, or when, owing to the movements entailed by duty and the desire to visit new scenes, combined with habitual carelessness, they had been lost or destroyed. This defect is conspicuous in the little known department of Erpetology, at which he worked zealously, and certainly discovered many new species, some of which have been described Dr. J. E. Grey, Mr. Blyth, and Dr. Stolickza, as well as by himself. Yet not more than three or four are quoted on his sole authority in Gunther's Indian Reptiles, and the few occasions on which Dr. Gunther does mention him, are only to point out the unrecognizable character of his descriptions*.

The third of the series of Manuals, that of Reptiles, would probably have repaired many of these faults. It has been printed, and the sheets were sent home after his death, but their ultimate disposal has not been determined yet. The materials for the concluding volume of the series, the Fish, are believed to have been in a state of forwardness, but what has become of them I am not aware.

It was his fond wish to have brought out new and improved editions of these works, which were to include Assam, the Khasi Hills, Cachar, Sylhet, Tipperah, Chittagong, Burma, and Ceylon. His contributions to the Ibis were preparatory to this object; and he contemplated great improvements in the second of the series, especially with regard to the micro-mammals, still involved in much confusion, to be cleared up only by patient and careful comparison of specimens. Unfortunately, much of his varied knowledge of facts has died with him, and he has left little among his papers to compensate for the loss.

Although he did not live to complete his great design, he accomplished enough to be of incalculable value to the lovers of natural history scattered over the length and breadth of that vast country in which he laboured so zealously himself.

* He was especially successful in obtaining a great number of new Batrachians. One curious species was found on the Nilagiri Hills, from its habit of uttering a peculiar metallic note, like repeated blows of a small hammer, which long eluded detection. It was generally supposed to be a bird which neither Jerdon nor any one else could discover. At last the patient watch of an old Shikari in my service was rewarded by tracing the note of the "Tinkler," as it was called, to a small burrowing frog which appears as *Limnodytes tinniens*, n.s. (Jour. As. Soc. Ben., xxii., 573) in his Catalogue, and again as *Ixalis tinniens* in his Notes (Proceedings As. Soc. Ben., 1870, p. 85); but is not even mentioned by Gunther.

I well remember the difficulties with which the young zoologist formerly had to contend, from want of books and type specimens for reference and comparison. Now it is the object of every sportsman, even, to get a copy of "Jerdon's Birds" and "Jerdon's Mammals," and their influence is seen in the intelligent and intelligible notices appearing in the *Field* and other periodicals. Works of greater pretension and more accurate detail have been given to the public, but in a form and at a cost beyond the reach of ordinary students. To no one is Indian science so deeply indebted as to Dr. Jerdon, not for his discoveries, considerable as they were, but for enabling others to follow his steps. It is earnestly to be hoped that the two remaining Manuals may yet appear, and that improved editions may be given of those already published.

Like many other men of genius, he was deficient in habits of order and method, and was especially careless in his private affairs. His whole thoughts were concentrated on his favourite pursuits, to the neglect of the commonplace but necessary requirements of domestic and pecuniary claims*. The consequence was that, although always in receipt of good allowances, he was continually harassed by the demands of creditors, and at his death his estate was found to be insolvent.

[Since the foregoing was written, his valuable collection of drawings has been brought to the hammer from time to time and dispersed. On the 14th January, 1873, twelve cases containing "many thousand coloured illustrations of birds," were sold by Sotheby, Wilkinson, and Hodge, and purchased by Lord Lilford. On the 24th May following, a few skins of birds and mammals were sold by J. C. Stevens, 38, King Street; and still later, on the 21st March, 1874, the Indian and Asiatic drawings, comprising eleven lots of mammals, birds, fish, crustacea, molluscs, insects, arachnida, fossil-vertebrata, phenogamous and cryptogamous plants, were disposed of to various parties, some of them, as the fish which were knocked down at £136, fetching large prices.]

* Many characteristic anecdotes, illustrative of his improvidence, are current among his friends, such as his cleverly talking over an English bailiff sent from Madras to Tellicherry to arrest him, and sending him back *re infecta*, but the bearer of a fine live specimen of a rare monkey (*Presbytis Johnii*)! On another occasion when summoned professionally by a French lady at Mahé, he met the French governor, also a keen naturalist, at the entrance to the town, who carried him off to see some novelties, which so absorbed him that he returned home late at night, never having seen his patient and wholly oblivious of the purpose for which he had come!

Contributions to the Entomology of the Cheviot Hills.
No. IV. By JAMES HARDY.

AGAIN, aided by my ever-ready friend, Mr. T. J. Bold, I present another series of Insects from the hill country of North Northumberland. In Coleoptera there is a falling off in rarities, as might be expected from previous long lists; but other orders are now being cultivated, and the yield has hitherto been encouraging, there being several to be recorded for the first time as Northumbrian, and a few as new to Britain also. There are some alterations in nomenclature arising from a more intimate knowledge and arrangement of the species.

COLEOPTERA.

- HARPALUS RUBRIPES. A variety with dark legs, female; beneath stones, Wooler haugh above Earle Mill, 1874. New.
- FALAGRIA SULCATA. Under old hay, Old Middleton wood.
- HOMALOTA TRINOTATA. Common under decayed hay.
- QUEDIUS RUFICOLLIS, and SUTURALIS. Old Middleton wood.
- HOMALIUM STRIATUM. Wooler district.
- EUSPHALERUM PRIMULÆ. One, Old Middleton wood. June.
- MICROPEPLUS STAPHYLINOIDES. Decayed hay Old Middleton wood.
- „ FULVUS. One, with the preceding.
- AGATHIDIUM LAEVIGATUM and ATRUM. One example of each, at an old hay-stack near Langlee.
- ANTHEROPHAGUS PALLENS. Two along with *A. nigricornis*, on *Comarum* at Cold Martin Lough.
- SERICOSOMUS BRUNNEUS. var. *fugax*. Among decayed hay, either at Langleyford Backwood, or at the foot of Hedgehope. One in 1872. New.
- CORYMBITES TESSELATUS. Among grass and ferns above Langleyford.
- DASICILLUS CERVINUS. About Langleyford.
- ERNOBIUM MOLLE. Among willows, &c., high up on Hedgehope.
- TETRATOMA ANCORA. Langleyford vale, One.
- CARIDA FLEXUOSA. Base of Hedgehope, One.
- SALPINGUS FOVEOLATUS. Beat from trees, foot of Brands-hill.
- RYNCHITES MEGACEPHALUS. One from birch above Langleyford.
- „ ÆNEOVIRENS. Two from Oak, Old Middleton wood.
- MAGDALINUS CARBONARIUS. On birch above Langleyford, one specimen, June 4; and other two, July 21. It is confined to a small circuit. Examples existed in some Newcastle cabinets, but of unknown origin; so that hitherto it has been regarded as doubtfully Northumbrian.
- LIOPUS NEBULOSUS. One beat from oak in July; Old Middleton wood.

SAPERDA SCALARIS. Beat from birch and then again from alder, above Langleyford; three examples. New to Northumberland, and one of the finest additions to the Eastern Border Fauna, of recent years.

RHAGIUM INQUISITOR and *BIFASCIATUM*. Both in Langleyford vale on sloe-blossoms. The latter is most abundant in the posts of wire fencing, to which its larvæ are very destructive.

CALYPTOMERUS DUBIUS. Abundant at an old hay-stack, Langleyford Backwood.

NEUROPTERA.

HEMEROBIUS NERVOSUS. Abundant among oaks; Brands-hill.

HALESUS DIGITATUS. Side of Coldgate water, Brands-hill. This and the following insects are the "woodcock-wings," of anglers.

CHETOPTERYX TUBERCULOSA. With the preceding among ferns, abundant.

RHYACOPHILA DORSALIS. With the preceding. Frequent.

HYMENOPTERA.

TENTHREDINIDÆ (SAW-FLIES).

HYLOTOMA USTULATA, *L.* Beat from birch above Langleyford.

PRIOPHORUS IMMUNIS, *Steph.*=*ALBIPES*, *Hartig*=*PADI*, *Thoms.* Wooler district, in June.

NEMATUS PROXIMUS, *St. Farg.* On juniper, heather, &c. White-side, sides of Langleyford vale, &c.

„ *RUFICORNIS*, *St Farg.* Langleyford, June.

„ *MYOSOTIDIS*, *Fab.* Bogs at the foot of Hedgehope, July.

„ *NIGRATUS*, *Retz.*=*MELANOSTERNUS*, *St. Farg.* Bogs at foot of Hedgehope, and in Cold Martin moss, July.

„ *GALLICOLA*, *Steph.* and *Westw.* The pretty gall is very frequent on *Salix purpurea*, by the side of Wooler water; also on *Salix nigricans*, in the Bizzle.

„ *VIRESCENS*, *Hartig.* Wooler district, one female example in July. This has been recently described by Mr Cameron in the "Scottish Naturalist," ii. p. 196.

ATHALIA ROSÆ, *L.* Common in woods, and by field sides.

SELANDRIA FLAVESCENS, *Klug.* A male; Wooler district in July. Resembles *S. serva*, but has the two basal joints of the antennæ yellow. New to Britain.

„ *ATRA*, *Steph.* This according to Mr Westwood, "Gard. Chron.," August 5, 1848, p. 524, is the parent of the leech-like slimy-covered grub, which disfigures and destroys the leaves of the pear-tree. I place it here, having received the grubs from the Rev. F. R. Simpson, September 12, 1873, who states that it was late in appearing this season. It has been observed in Berwickshire about Hutton.

HEMICHROA ALNI, *L.* Two females beat from birch above Langleyford, July.

HEMICHROA RUFA, *Panz.* From the same locality.

„ LURIDIVENTRIS, *Fallen.* Only the pale green curious onisciform larva on the underside of the leaves of alder; frequent by Wooler water and Lill-burn. The larva is figured by Reaumur. Its history by Mr. Cameron is given in "Scot. Naturalist," ii., p. 158.

ALLANTUS ARCUATUS, *Forst.* Langleyford, &c., in July.

PACHYPROTASIS RAPÆ, *L.* Woods on Wooler water, July.

STRONGYLOGASTER FILICIS, *Klug.* One male only, above Langleyford. I found another in Old Middleton wood. New to Britain. See Mr. Bold's notice in "Entomologist's Monthly Magazine."

„ EBORINUS, *Klug.* Female; woods on Wooler Water, July.

TENTHREDO ATRA, *Klug.* Birch woods above Langleyford, July.

„ TILLÆ, *Panz.* Female; ditto.

„ SCALARIS, *Klug.* Common.

„ OLIVACEA, *Klug.* Woods above Langleyford; four examples.

„ LIVIDA, *L.* Birch woods above Langleyford; July.

„ BALTEATA, *Klug.* Ditto; frequent.

„ RUFIVENTRIS, *Fab.* Ditto; rare.

DOLERUS VARISPINUS, *Klug.* Willows, near Langleyford; May.

„ ANTHRACINUS, *Klug.* Ditto; May.

„ CORACINUS, *Klug.* Above Langleyford, July.

„ GONAGER, *Fab.* Ditto; May.

EMPHYTUS SEROTINUS, *Klug.* Several in October, beat from oak in Old Middleton wood, at Brand-hill, and Yeavinger Bell. It is extraordinary to find saw-flies so late as this date. The specific name is very appropriate.

ICHNEUMONIDÆ.

ICHNEUMON VULNERATORIUS, *Zett.* Several from Cheviot, &c. May and June. A Norwegian species, new to Britain.

FOSSORES.

ODYNERUS TRIMACULATUS. On raspberry blossoms, below Langleyford.

VESPIDÆ.

VESPA SYLVESTRIS. On flowers of *Comarum*, Cold Martin Moss.

APIDÆ.

HALICTUS RUBICUNDUS. Whiteside road.

„ CYLINDRICUS. Old Middleton wood.

„ VILLOSULUS. Ditto.

ANDRENA MINUTULA. Sand-banks above Earle Mill; May.

NOMADA ALTERNATA. Whiteside road; May, June.

„ FURVA. Roadside, foot of Cheviot above Langleyford.

CYNIPIDÆ (GALL-FLIES).

CYNIPS LIGNICOLA. Single examples in a planting above Middleton Hall; among old oaks at Brands-hill; and in an opening of an ancient wood at Yeavinger Bell. The trees there are nearly all *Quercus sessiliflora*.

„ LONGIPENNIS. The leaves of the old oaks at Brands-hill were quite clustered, this autumn, with the galls of this, the "oak-spangle."

NEUROTERUS NUMISMATIS. The pretty cup-galls of this species grew along with the preceding, and were sometimes as numerous. Both noticed in Berwickshire, in like abundance.

HEMIPTERA HETEROPTERA.

PIEZODORUS LITURATUS. On furze, Whiteside hill.

ACANTHOSOMA PICTUM. One from birch, Yeavinger wood; Oct. New.

DRYMUS SYLVATICUS, var. RYEI. Yeavinger wood; a small dark variety.

ORTHOSTIRA NIGRINA, *Fallen*. Among moss, top of Cheviot; new *O. cervina* of a former list.

DERÆOCORIS STRIATUS. Several from birch in July, above Langleyford; new.

LITOSOMA VIRIDINERVIS. Wooler district in July; new.

PHYLLUS PALLICEPS. Oaks, Old Middleton wood; July.

IDolocORIS ERRANS. Old Middleton wood, one in June; more in October.

APOCREMNUS OBSCURUS. Birch, above Langleyford, July.

„ QUERCUS. One, Old Middleton wood, July; new.

PSALLUS LEPIDUS. Oaks, Old Middleton wood.

„ ROSEUS, var. KIRCHBAUMI, *Fieb.* Wooler district; new.

„ DISTINCTUS. Three specimens, Wooler district; new.

„ VARIANS. All the former *P. Salicis* belong to this.

„ SALICIS. Near Wooler, October; two typical examples.

ORTHOPS CERVINUS. Old Middleton Wood, two.

LYGUS SPINOLÆ. Two examples from Old Middleton wood in former years, and one in October.

„ RUGICOLLIS. Old Middleton wood, one in June.

SALDA VESTITA, *Doug. and Scott*. This is a new British species, not yet in print, founded on examples named *S. pallipes* in former lists. The distinctive marks first pointed out by Mr. Bold. Margin of the river Glen, and borders of pools in Wooler haugh.

HEMIPTERA HOMOPTERA.

LIBURNIA PERSPICILLATA, *Boh.* (Opusc., 1845). One example from moss at the root of a thorn, outskirts of Yeavinger Bell wood; October. New to Britain.

LDIOCERUS POPULI. From willows on the hills, in October.

- BYTHOSCOPIUS ALNI, *Schk.* Birches on the hills.
 „ FRUTICOLUS, *Fallen* Ditto.
 „ RUFUSCULUS, *Fieb.*—BREVICAUDA, *Thoms.* Opusc.
 Rarer. These three are formed out of the old *Pediopsis fruticola*.
 PEDIOPSIS CEREAE, *Germ.* Wooler district.
 AGALLIA NERVOSA, Dry rocky bank, Gleadcleugh, above Akeld.
 ATHYSANUS TINCTUS, *Zett?* Moss at root of hawthorn, in Yeavinger Bell wood, October. New to Britain.
 „ SUBFUSCULUS. Old Middleton wood, July.
 THAMNOTETIX INTERMEDIA, *Boh.* Seven examples, grass on the hills, July. New to Britain.
 „ MELANOPSIS, *Hardy*, "Tyneside Nat. Club Trans.," i., p. 427.—T. SCOTTI, *Fieber.* Among short grass on Middleton banks of Coldgate water, and among rocks in Gleadcleugh, above Akeld; October. New.
 ALLYGUS MIXTUS. Grass, Middleton banks.
 DELTOCEPHALUS STRIATUS. Hay in July, Langleyford.
 „ PUNCTUS. Middleton banks, &c., October.
 „ SOCIALIS. Ditto.
 „ PULICARIUS. One; ditto.
 NOTUS FLAVIPENNIS. Among *Carices*, Yeavinger Bell wood.
 „ CITRINELLUS. Grass, Middleton Banks.
 CHLORITA FLAVESCENS and VIRIDULA. Trees, October.
 TYPHLOCYBA VITTATA, PULCHELLA, and URTICÆ. Old Middleton wood.
 ANOMIA GEOMETRICA and ULMI. Ditto.
 ZYGINA BLANDULA. Ditto.

ARACHNIDA.

The Rev. O. P. Cambridge has kindly furnished me with a copy of his article "On new and rare British Spiders," contributed to the "Transactions of the Linnæan Society," Vol. xxviii., p. 523-555, just issued. It contains the results of his examinations of the collection of Arachnida which I made in 1871-2 around Wooler, on the Cheviot Hills, and near Oldcambus (Berwickshire), and descriptions of several of the new species indicated in our "Proceedings," Vol. vi., pp. 256-257. The following are described for the first time:—

- LINYPHIA CONTRITA. An adult male, Cheviot, October, 1871.
 „ LINGUATA. A female, Oldcambus, spring, 1872.
 „ PRUDENS. Adults of both sexes, Cheviot Hills, October, 1871.
 „ ? ARCANÆ. A single male, Cheviots, October, 1871.
 „ RETICULATA. In small cavities among grass, or in the soil, beneath stones at the peaks of Cheviot and Hedgehope;

and also at the head of Goldsleugh ravine. This is a well colour-marked species. "The whole of the fore-part, including the legs and palpi, is of a clear brightish orange-yellow colour; the abdomen is dull whitey-brown, marked with a sort of network veining of a paler hue." In a note, Mr. C. says that Dr. L. Koch has recently described as an *Erigone* (*E. adiptata*), a spider scarcely distinguishable from *L. reticulata*, except in the colour and markings of the abdomen. There are also slight differences in the structure of the palpi. It was found near a glacier on the mountains of South Tyrol.

NERIENE PAVITANS. A single female example from Cheviot, October, 1871.

" **CLARA.** A female, Cheviot, October, 1871.

" **PUDENS.** A female, ditto.

" **MORULA.** An adult example of each sex, ditto.

" **UNCATA.** Adults of both sexes, near Wooler, ditto.

WALCKENAERA NODOSA. A single example, Coldmartin Moss, near Wooler, October, 1871.

The following are noticed as rare, or for emendation of nomenclature:—

LYCOSA NIGRICEPS, *Westr.* = **CON-**
GENER, *Cambr.*

THOMISUS VIATICUS.

DRASSUS TROGLODYTES, *Koch* =
CLAVATOR, *Cambr.*

CLUBIONA PALLENS, *Hahn.* =
DIVERSA, *Cambr.* Top of
Cheviot, October, 1871.

" **RECLUSA.** Oldcam-
bus, and not "Northumber-
land," as indicated in "Linn.
Trans."

LINYPHIA ALTICEPS, *Sund.* Be-
neath stones, . apex of
Cheviot, &c.

" **LUTEOLA**, *Blackwall.*
= **ALTICEPS**, *Blackwall.*

Wooler district and Ber-
wickshire.

" **ANGULIPALPIS.** An
adult male, Cheviot.

" **RUFIA.** In woods on
river banks above Wooler.

" **ERICÆA.** Vicinity of
Oldcambus.

LINYPHIA DECOLOR. Ditto.

" **EXPERTA.** Cheviot.

" **APPROXIMATA**, *Camb.*
Adults from the Wooler
collection, now first recorded.

" **SYLVATICA.** Cheviot
collection. Males

" **EXCISA.** Do., do.

" **TIBIALIS.** Do. One
male.

" **PROMISCUA.** Do. One
male.

WALCKENAERA ACUMINATA. Do.
Many of both sexes.

" **TRIFRONS.** Ditto.
One male.

" **PERMIXTA.** Do.
both sexes, numerous.

" **NEMORALIS.** Old-
cambus. Two males.

" **NUDIPALPIS.** Do.
One male.

" **BREVIBES.**
Cheviot. Several adult
males.

In the "Linn. Trans.," xxviii., p. 450, Mr. Cambridge records *Nerienne cornigera*, which I had found in Berwickshire. This is another addition to the Border list. He gives figures of it; and also of *N. sylvatica* and *Walckenaëra nudipalpis*, both from Berwickshire.

Donations to the Berwickshire Naturalists' Club, from Scientific Societies, &c., 1872-3.

- BATH. Proceedings of the Bath Natural History and Antiquarian Field Club, Vol. ii., No. 4. 1873. 8vo. *The Club.*
- BELFAST. Tenth Annual Report of the Belfast Naturalists' Field Club. 1872-3. 8vo. *The Club.*
- BOSTON, U.S.A. Proceedings of the Boston Society of Natural History, Vol. xiii., pp. 1-368. 1869, 1870. 8vo. *The Society.*
- „ Ditto, Vol. xiv., pp. 225-426. 1872. 8vo. *Ibid.*
- „ Ditto, Vol. xv., pp. 1-256. 1872-3. *Ibid.*
- „ Historical Notes on the Earthquakes of New England, 1638-1869. By Wm. T. Brigham, A.M. (Memoirs Bost. Soc. Nat. Hist., Vol. ii. 1871. 4to.) *Ibid.*
- „ Description of the Balænoptera Musculus. By Thomas Dwight, jun., M.D. (Mem. Bost. Soc. Nat. Hist., Vol. ii., Part ii., No. ii. 1872. 4to.) *Ibid.*
- „ On the Carboniferous Myriapods preserved in the Sigillarian stumps of Nova Scotia. By Samuel H. Scudder. (Mem. Bost. Soc. Nat. Hist., Vol. ii., Part ii., No. iii. 1873. 4to.) *Ibid.*
- „ Agassiz, Louis, Address delivered on the Centennial Anniversary of the Birth of Alexander von Humboldt. 1869. 8vo. *The Boston Soc. of Nat. Hist.*
- BREMEN. Abhandlungen herausgegeben vom Naturwissenschaftlichen Vereine zu Bremen, 1869, 1870, 1871, 1872, 1873 (six parts). 8vo. *The Society.*
- „ Appendix to do. Weather Tables for the year 1871. Bremen, 1872. 4to. *The Society.*
- CHRISTIANA. Forekomst af Kise i visse Skifere i Norge. (Layers of Pyrites in certain Slates in Norway), af Amund Helland. 1873. 4to. *The University.*
- „ Mindefest for Hans Majæstat Kong Carl, 19th November, 1872. 4to. *Ibid.*

- CHRISTIANA. On some remarkable forms of Animal Life from the great deeps off the Norwegian Coast. By George Ossian Sars. 1872. 4to. *Ibid.*
- „ Die Pflanzenwelt Norwegens. Von Dr. F. C. Schübeler. 1873. 4to. *Ibid.*
- „ On the Rise of Land in Scandinavia. By S. A. Sexe. 1872. 4to. *Ibid.*
- DUMFRIES. The Transactions and Journal of the Proceedings of the Dumfriesshire and Galloway Natural History and Antiquarian Society, Session 1867-8. 1871. 8vo. *The Society.*
- EDINBURGH. Elliot, Sir Walter, Extracts from the Address of the President of the Botanical Society of Edinburgh, 3d Nov., 1870. (On the Organisation of Naturalists' Clubs). 1871. 8vo. *The Author.*
- „ Transactions of the Edinburgh Geological Society. Vol. ii., Parts i. and ii. 1873. 8vo. *The Society.*
- ESSEX, SALEM, MASS., U.S.A. Bulletin of the Essex Institute, Vol. i., 1869. 1870. 8vo. *The Institute.*
- „ Do., Vol. ii., 1870. 1871. 8vo. *Ibid.*
- „ Do., Vol. iv., 1872. 1873. 8vo. *Ibid.*
- „ Proceedings and Communications of the Essex Institute, Vol. v. 1866-1868. 8vo. *Ibid.*
- „ Ditto, Vol. vi., 2 Parts. 1870. 8vo. *Ibid.*
- „ Historical Notice of the Essex Institute. 1866. 8vo. *Ibid.*
- „ To-Day; a paper printed by the Essex Institute, from Oct. 31 to Nov. 4. 1870. 4to. *Ibid.*
- GLASGOW. Proceedings of the Philosophical Society of Glasgow, 1872-3, Vol. viii., Nos. i. and ii. 8vo. *The Society.*
- „ Transactions of the Geological Society of Glasgow, Vol. iii. Supplement on the Carboniferous Fossils of the West of Scotland. 1871. 8vo. *The Society.*
- „ Ditto, Vol. iv., Part ii. 1873. 8vo. *The Society.*
- „ Ditto. Palæontological Series, Part i. The Silurian Brachiopoda of the Pentland Hills. By Thomas Davidson, F.R.S., &c. No date. 4to. *The Society.*
- „ Annual Report and Transactions of the Glasgow Society of Field Naturalists. Session 1872-3. 8vo. *The Society.*
- HAWICK. Reports of the Archæological Society of Hawick, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872. 4to. *The Society.*
- INDIANAPOLIS, U.S.A. Geological Survey of Indiana, 1869. By E. J. Cox, State Geologist; with Map and Coloured Section. 8vo. *The Author.*

- LEEDS. Report of the Proceedings of the Geological and Polytechnic Society of the West Riding of Yorkshire. 1870. 8vo. *The Society.*
 „ Annual Report of Leeds Philosophical and Literary Society for 1870-1. *The Society.*
- LIVERPOOL. Proceedings of the Literary and Philosophical Society of Liverpool, Nos. 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 25, 26, 27. 1846-1873. 8vo. *The Society.*
- LONDON. Proceedings of the Geological Association, Vol. ii., Nos. 3, 4, 5, 6, 7, 8. 1872-3. 8vo. *The Association.*
 „ Ditto, Vol. iii., Nos. 1, 2, 3, 4. 1873. 8vo. *Ibid.*
 „ Annual Reports of Ditto for 1871, 2, 3. *Ibid.*
- NEWCASTLE. Natural History Transactions of Northumberland and Durham, Vol. iv., Parts i. and ii. 1872. 8vo. *Natural History Society of Northumberland and Durham.*
 „ Ditto, Vol. v., Part i. 1873. *Ibid.*
- PLYMOUTH. Annual Report and Transactions of the Plymouth Institution and Devon and Cornwall Natural History Society, Vol. iv., Part ii., 1870-1, and Vol. iv., Part iv. 1872-3. 8vo. *The Institution.*
- SMITH (C. Roach). The Rural Life of Shakespeare, as illustrated by his Works. London, 1870. 8vo. *The Author.*
- WASHINGTON, U.S.A. Annual Report of the Board of Regents of the Smithsonian Institution, 1869. Washington, 1871. 8vo. *Smithsonian Institution.*
 „ Ditto for 1870. *Ibid.* 1871. *Ibid.*
 „ Ditto for 1871. *Ibid.* 1873. *Ibid.*
 „ Report of the Commissioner of Agriculture for the year 1869. Washington, 1870. 8vo. *The Government.*
 „ Do. for 1871. *Ibid.* 1872. 8vo. *Ibid.*
 „ Monthly Reports of the Department of Agriculture for the year 1872. *Ibid.* 1873. 8vo. *Ibid.*
 „ Special Report on Immigration [to the Western and Southern States of America], by Edward Young, Ph. D. *Ibid.* 1872. 8vo. *Ibid.*

Places of Meeting for the Year 1874:—

Ford and Etal	...	...	Thursday, May	14.
Foulden	...	...	„	June 25.
St. Abb's Head	...	...	„	July 30.
Bothal	...	...	„	Aug. 27.
Kelso.	...	...	„	Sept. 24.

Rain Fall at Glanton Pyke, Northumberland, in 1873; communicated by FREDK. J. W. COLLINGWOOD, Esq.; and at Lilburn Tower, Northumberland; communicated by EDWARD J. COLLINGWOOD, Esq.

GLANTON PYKE.

	Inches.
January - -	2·46
February - -	2·05
March - -	1·46
April - -	0·91
May - -	2·16
June - -	1·10
July - -	1·75
August - -	3·89
September - -	2·67
October - -	1·91
November - -	2·32
December - -	0·74

23·42

Rain Gauge—Diameter of Funnel, 8in., Height of Top above Ground, 4ft. 4in.; above Sea Level, 530ft.

LILBURN TOWER.

	Inches.
January - -	1·878
February - -	2·125
March - -	1·729
April - -	0·480
May - -	1·500
June - -	1·035
July - -	1·901
August - -	3·725
September - -	2·469
October - -	3·224
November - -	2·472
December - -	1·339

23·877

Rain Gauge—Diameter of Funnel, 10in. square; Height of Top above Ground, 6ft.; above Sea Level, 300ft.

Rain Fall at North Sunderland. Northumberland, in the Year 1873. Communicated by the Rev. F. R. SIMPSON.

Month.	Total Depth.	Greatest Fall in 24 hours.		Days on which '01 or more fell.
	Inches.	Depth.	Date.	
January -	1·59	·25	15th	19
February -	1·88	·51	26th	16
March -	1·99	·47	7th	23
April -	0·75	·12	26th	17
May -	1·99	·48	22nd	17
June -	1·03	·35	28th	14
July -	2·90	1·09	22nd	17
August -	2·96	·40	31st	24
September -	2·85	·87	30th	17
October -	3·21	1·82*	2nd	15
November -	1·23	·43	5th	15
December -	0·72	·43	5th	8
	23·10	7·22		202

Rain Gauge—Diameter of Funnel, 8 inches; Height of Top above Ground, 1 foot 2 inches; above Sea Level, 70 feet.

* This is the heaviest rainfall ever registered at this station. The rain ceased before noon of the 3rd, having begun about 9 a.m. of the 2nd, and the rainfall for the 27 hours was 2·01in.

General Statement.

The INCOME and EXPENDITURE have been:—

	£	s.	d.
Balance in Treasurer's hand...	54	16	0
Arrears received.....	21	16	0
Entrance Fees.....	4	10	0
Subscriptions	54	6	0
	<hr/>		
	£135	8	0

EXPENDITURE.

Printing	44	13	3
Engraving	22	4	6
Expenses at Meetings, includ- ing Conveyance, &c.....	10	1	8
Postage and Carriage.....	10	14	10½
Copy of Proceedings bought for Club	4	4	0
	<hr/>		
	91	18	3½
Balance in hand.....	43	9	8½
	<hr/>		
	£135	8	0

MEMBERS ELECTED IN 1873.

ORDINARY MEMBERS.

John Hutton Balfour, M.D., &c., Professor of Botany and Materia Medica, Edinburgh	...	...	} July 30.
Rev. Evans Rutter, Spittal, Berwick	...	...
Rev. Hastings M. Neville, Ford, Cornhill	...	...	Sept. 25.
Rev. James Henderson, Ancroft, Beal	...	...	" "
Professor A. Freire-Marreco, Neville Hall, Newcastle	...	...	" "
Charles M. Wilson, Hawick	...	...	" "
Captain David Milne Home, M.P., Paxton House, Berwick	...	...	} " "
Rev. William Cockin, Lowick	...	...
Rev. William Stobbs, Gordon	...	...	" "
William Allan Jamieson, M.B., Berwick	...	...	" "
James Nicholson, Murton, Berwick	...	...	" "
Rev. Joseph Waite, Norham	" "

HONORARY MEMBER.

Miss Margaret R. Dickenson, Norham	" "
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PROCEEDINGS

OF THE

BERWICKSHIRE NATURALISTS' CLUB.

Address delivered to the Berwickshire Naturalists' Club, at Kelso, September 24th, 1874. By JAMES SCOTT ROBSON, M.D., of Belford, Bowmontwater.

GENTLEMEN,

AT the last annual meeting, the Club did me the honor of electing me as their President for the coming year, and it is now my duty to give a resumé of the Proceedings of the Club during the past summer; but before doing so I must allude briefly to the great loss the Club has sustained by the death of four of its members since we met together at Berwick in 1873, viz.: Messrs. J. C. Langlands and A. Jerdon, the Rev. Canon Rooke, and the Rev. W. Procter. Mr. Langlands took much interest in archæological matters, and was, I believe, the first, about forty years ago, who drew attention to the rock markings, now found to be so common on the rocks in Northumberland. Mr. Jerdon was a most accomplished ornithologist and botanist; several papers by him on cryptogamic botany are preserved in the records of the Club. Canon Rooke was President of the Club so long ago as 1854.

Our last annual meeting was held at Berwick, on the 25th

September, 1873, when the members breakfasted, by special invitation, at the residence of Mrs Barwell Carter, the eldest daughter of the late Dr. Johnston, founder of the Club in 1831, and herself an honorary member. After breakfast, the attention of the members was drawn to a rich collection of objects of natural history. These consisted of the original "Flora of Berwick," collected by her father, and drawings of subjects illustrating the "Natural History of the Eastern Borders." Dr. Johnston's collection of seaweeds of the east coast was likewise exhibited, together with many other objects too numerous to mention. The microscope of feeble power with which Dr. Johnston made his great discovery of the circulation in sponges, was beheld with interest. A collection of drawings of the phenogamous plants of the district, contributed by Miss Dickinson, of Norham, was much admired.

After breakfast, most of the members availed themselves of an invitation from Mr. George Young to proceed up the river to Heugh Shield, above the mouth of the Whitadder—a distance of about three miles—to witness the operation of marking certain fish for future identification. The species marked were "whitlings" and "blacktails," both being supposed to be the young of the bull-trout (*Salmo Eriox*) in different stages of growth. This operation was going on under the superintendence of Mr. List and certain gentlemen belonging to the Tweed Commission. A considerable number, about one hundred and fifty, were caught, measured, weighed, and marked by the insertion of a wire, bearing a cypher, into the dead tail fins. The party then returned to Berwick and met thirty-two members and five guests at dinner, at the King's Arms Hotel, under the presidency of Dr. Stuart. After the conclusion of dinner, Dr. F. Douglas, one of the Secretaries, read an account of the opening of three cists on the estate of Sunlaws, in January last; and Sir Walter Elliot read an obituary notice of the late Dr. T. C. Jerdon, of the Madras Medical Service, who had rendered his name

famous throughout India by his botanical and ornithological researches. Dr. Douglas also communicated to the Club the finding, by Mr. Kelly, of *Poa Sudetica* in the Blackadder woods; and Mr. Brotherston shewed specimens of *Chenopodium polyspermum* in both varieties, *acutifolium* and *cymosum*, obtained growing in the Newton Don fields.

Twelve ordinary members were elected, namely: Rev. Evan Rutter, Spittal, Berwick; Revs. Hastings M. Neville, Ford Rectory, and James Henderson, Ancroft; Professor A. Freire Marecco, Neville Hall, Newcastle; Chas. M. Wilson, Hawick; Captain David Milne Home, M.P. for Berwick; Rev. W. Stobbs, Gordon; Dr. W. A. Jamieson, Berwick; Rev. J. Waite, Vicarage, Norham; and, as an honorary member, Miss M. Dickinson.

Dr. Stuart, of Chirnside, then read an able address, touching in a brief though perspicuous manner on all subjects which had engaged the attention of the Club during the past year, and concluded by nominating Dr. Robson Scott as his successor. The places of meeting for the Club for next summer were also fixed: At Etal and Ford in May; Foulden in June; Coldingham, for St. Abb's Head, in July; Bothal near Morpeth, in August; and Kelso in September. The weather proved most favourable for the meeting, which was attended by several members from a distance.

The Club held the first of its meetings for 1874 at Etal and Ford, on Thursday, 14th May. There were present:—Dr. Robson Scott, President; Dr. F. Douglas and Mr. Hardy, Secretaries; Revs. Hastings M. Neville, W. J. Meggison, L. J. Stephens, B. S. Wilson, D. Paul, — Groves (Ford), and — Fellowes (Etal); Drs. C. Stuart, A. Brown, J. Paxton, and J. Marshall; Captain Macpherson; Messrs. W. Dickson, S. H. Smith, R. G. Bolam, J. Dunlop, J. E. Friar, J. Nicholson, and A. and J. Marshall. After breakfasting at the hospitable table of the Rector, the party adjourned to the Church and heard the service for the day. The Church of Ford is old, and has a peculiarly shaped tower. A tombstone in the

Church has the date of 1614. Two old registers were shewn of dates 1684 and 1689. The latter, beautifully written, had been kept by a Dr. George Chalmers, of Kennoway, in Fifeshire. There is a very fine communion service, of silver overgilt with gold, presented by Lady Fitzclarence. The organ was likewise her gift.

The view from the Rectory commands a fine sky outline of the ridge of "Cheviot's mountains lone"; also, the lower Glendale heights and torrs; and a front aspect of Flodden Hill, with its dark wooded summit; and the cultivated lands on both sides of the Till, mapped off by hedges, already brightening into green under the genial influence of spring. The sloping glebe land lies in pasturage, and shows the sweeping high-backed ridges of a past era of agriculture.

The party then started for Etal. Before reaching Ford-Forge on the way, Dr. Paxton called attention to a field belonging to Hay farm, where, at the bottom bordering the Till, there was turned up in draining some years since, a sandstone with an inscribed circle. This stone is now in the possession of Sir Horace St. Paul, at Ewart House. Dr. Marshall also mentioned that on his hill at Chatton Park he had recently discovered, under an overarching crag on the north-east side, two carved circles on the upper face of the rock, all the others seen in that locality having been on flat stones. Mr. Hardy stated that he had examined the pavement rock of Cuddie's Cove, near Doddington, and found it pitted with seven rounded hollows: four in a quadrangle, and three in line from these—the group being not unlike the figure of Charles's Wain. Mr. Bolam had also obtained a fresh example of a detached stone with two deep cut circles and large hollows, from Weetwood Hill. The bird most conspicuous during our walk was the Redstart, which appears to be increasing in numbers on both sides of the Borders.

Of Etal Castle, which stands close upon the Till, there remains a pretty entire entrance tower, which has the arms

of Manners above the portal. An ornamental ecclesiastical window is also to be noted here, as if it had belonged to a chapel where divine service had been performed to the inmates of the Castle. On one side of the grassy area, which is quadrangular and about a quarter of an acre in extent, is a ruinous wall, representing the wall "made of stone and lime," erected by Sir Robert de Manners in 1342, when the Castle was embattled. At the north-east corner stands the donjon tower, or keep, a tall square pile, still almost complete in form, although its walls are slowly crumbling away. Like most of the Border fortalices, the lower, or ground, compartment has been vaulted for the reception of cattle during alarms of invasion. The second compartment contains the remains of a very large fire-place, which would allow the ancient cooks plenty of elbow room in preparing the huge roasts and ample dishes then in vogue. Other two tiers rank above: the one the hall, the other the sleeping apartments. The small arched windows have no key stones, but transoms or horizontal mullions. The Rev. James Raine conjectured that the building was scarcely older than the reign of Henry VI. The families who have held this Castle are the Manners, now represented by the Duke of Rutland; the Collingwoods, under a lease of three lives, in the reign of Queen Elizabeth; and George Home, Earl of Dunbar, the Scotch favorite of James I., whose daughter and son-in-law disposed of it to the Carrs, from whom Lady Fitzclarence is descended. Lady Fitzclarence was married on the 19th May, 1821, to Colonel Lord Fitzclarence, son of William IV., who died at Bombay in 1854. Above the Castle are visible the ruins of an old bridge across the Till; the foundations are of a triangular form, the apices pointing up the river. It was over this bridge, doubtless, that the English and captured Scotch artillery was conveyed to Etal the day after the battle of Flodden. The following extract from the "Booke of the State of the Marches," by Sir Robert Bowes, 1542, shows that the Castle

of Etal had been allowed to fall into a ruinous condition after the battle of Flodden :—" The Castle of Etayle being of the Erle of Rutland's inherytance, standeth upon the este side of the river Tyll, three miles from the river of Tweede, ys for lack of reparations in very great decay, and many necessary houses within the same become ruynous and fallen to the ground, yt been much necessary to be repaired for the defence of these borders, as well yn tyme of peace as for the receyvinge and lodging of a garryson of one hundred men or mo yn tyme of warre, for which purpose the place ys very convenient. There was also at Etayle, a brigge over the said river Tyll, which decayed and fallen down of late to the great hurt, trouble, and annoyance of the inhabitants thereabouts, which had always ready passage when the river Tyll is waxen great, and past the rydinge upon horseback, and much necessary it were to have it re-edifyed again, as well for the purpose aforesaid as for the conveying of ordnance and arms into Scotland over the same." The re-edification, however, seems never to have been undertaken, and it is not to be wondered at that the remains are now fragmentary. Sir Robert Bowes passes some severe strictures upon the mercenary and unpatriotic conduct of owners of castles and barmekyns at this period, inasmuch as when these fall into disrepair by violence from the Scots or otherwise, they do not repair them, but, deserting them, go further inland so as to be less liable to disturbance and loss themselves, leaving their followers without protection when invaded by the plundering Scots.

Etal House, in the interior, is a museum of objects connected with royalty, in its paintings, portraits, and armour (some of it of exquisite finish), regimental flags and China ware of extreme value, presented by William IV. to his favorite son, who is said in personal appearance to have much resembled his father. Except in one tapestried room, the fittings up are modern. The exterior of the mansion is plain and unassuming. The small ornamental Chapel at

Etal was glanced at ; and the site of an old Chantry, founded by Sir Robert de Manners about 1346-47, which is now surrounded by a marsh at the margin of the Till, was examined. When the site was uncovered some years since, a human skull was turned out, in which a wren had inserted her nest. On returning from Etal, rain threatened, and the bold pencilling of the opposite hills became shrouded in a veil of mist, but the party reached Ford Castle before much rain fell. The aspect of the interior is in quite a different style from that of Etal, as not only every room is profusely decorated, but has the undimmed polish of newness. The ceilings were especially remarked for their beautiful tracery and ornaments, in imitation of carving in wood. Many of the windows have stained glass, pictured with family armorial bearings. There are numerous family portraits and small paintings, some being by the Marchioness of Waterford herself, to whom the entire structure owes its elaborate completeness. Only a small portion of the ancient Castle, a tower, remains hidden in the modernization, like "a fly in amber." The Castle was embattled by Sir William Heron in 1339. Forde has been inherited by the de Fordes, Herons, Carrs, Blakes, Delavals, and now by the Beresfords. The present Dowager-Marchioness of Waterford is Louisa, third daughter of the late Baron Stuart de Rothesay, widow of the third Marquis. In the Survey of the Borders before mentioned, it is said : "The Castle of Forde standynge also on the este bank of the river Tyll, was brounte by the last King of Scots a little before he was slain at Flodden field. Some part thereof hath been rebuilt again sythence that time, but the great buildings and much necessary houses resteth ever sythence waste and in decaye, the which, if repaired, were able to receive and lodge a hundred or mo horsemen to lye therein yn garryson in tyme of war. The Castle ys of the inherytance of Sir Wil. Heron's heysr." There is a room in the old part of the Castle, in which an inscription over the fire-place records that King James of

Scotland lay there on the night of the 12th September, 1415, the night before the battle of Flodden : but the Castle had been besieged and burnt before that, and it is doubtful if the king was ever in the Castle at all. The first mention of this dubious fact, and of the king's flirtations with Lady Heron, is by old Pitscottie, who doubtless wished to extenuate the negligence or rashness of the king before the battle, thereby finding some color of excuse for the defeat of his countrymen. This view of the matter soon became popular, and was adopted by Sir Walter Scott in his "Marmion" and in his "Tales of a Grandfather."

Twenty-three assembled to dinner in Mr. Pattison's Temperance Hotel. An account of Etal had been read by Mr. Hardy after breakfast, and now many of the circumstances which render Ford so memorable were detailed. The Rev. Beverley S. Wilson, of Duddo, was unanimously elected a member of the Club ; and Captain Charles Gandy, Barndale, Alnwick, was proposed. Thanks were voted to the two noble ladies who had opened their mansions and grounds to the Club. Dr. Douglas read a communication from Mr. Harvie Brown, on the desirability of an organisation for the periodical publication of select memoirs of scientific clubs. The Club then adjourned to inspect the spacious and handsomely fitted up school-house, whose walls are enriched by cartoons and medallions painted by the Marchioness.

The Club held its second meeting for the year on Thursday, June 25th, at Foulden, the seat of John Wilkie, Esq., and breakfasted, by invitation, at his mansion. As I was unavoidably absent on this occasion, I am indebted to the kindness of Mr. Hardy for the following notes. There were present : Sir Walter Elliot ; David Milne Home, Esq. ; Professor Balfour ; Mr. James Hardy, Secretary ; Revs. W. Darnell, J. S. Green, B. S. Wilson, Peter Mearns, Evan Rutter, D. Paul, A. Davidson, P. Mackerron ; Drs. C. Stuart and P. Hughes ; Messrs. W. B. Boyd, S. H. Smith, W. Stevenson, James Purves, R. Douglas, J. E. Friar, W. Shaw,

F. Walker, J. Nicholson, W. and R. Weatherhead. After breakfast, the Secretary made some remarks on the signification of the word "Foulden," which, by reference to the orthography in the early charters, appears to have been named "Fugeldean," or the dean of birds. On enquiry being made about the history of "Tibbie Fowler," whose classic locality formed part of the day's programme, he quoted some of the stanzas in which that over-attended damsel is graphically commemorated; and it was suggested that the entire song should be inserted in our records*. It appeared first in its present shape in "Johnson's Museum" in 1787, but a fragment had been published previously in "Herd's Collection" of 1776, and it is supposed to be of eighteenth century origin. Mr. Robert Chambers, however, from finding that a certain Isabella Fowler was married to a son of Logan of Restalrig in the sixteenth century, concludes thereby that it refers to her, and makes the song two centuries older. After visiting and inspecting some old tomb-stones in the burial-ground attached to Foulden Church—which is celebrated as having been the meeting place of the Commissioners sent by Queen Elizabeth to vindicate the execution of Mary,—the party proceeded through the beautiful grounds of Mr. Wilkie to the Whitadder, which here runs between remarkably acclivitous banks, rising from one-hundred-and-twenty to one-hundred-and-

* "TIBBIE FOWLER.

Tibbie Fowler o' the Glen,
 There's ower mony wooing at her;
 Woonin' at her, puin' at her,
 Courtin' her and canna get her;
 Filthy elf, it's for her pelf
 That a' the lads are woonin' at her.

Ten cam' east and ten cam' west;
 Ten cam' rowin' over the water;
 Two cam' doon the lang dyke-side:
 There's twa-and-thirty woonin' at her.

There's seven but, and seven ben,
 Seven in the pantry wi' her;

Twenty head about the door:
 There's ane-and-forty woonin' at her.

She's got pendles in her lugs,
 Cockle shells wad set her better!
 High-heeled shoon and siller tags:
 And a' the lads are woonin' at her.

Be a lassie e'er sae black,
 Gin she hae the name o' siller,
 Set her up on Tintock Tap,
 The wind will blaw a man till her.

Be a lassie e'er sae fair,
 An' she want the penny siller,
 A flee may fell her i' the air
 Before a man be even'd till her."

fifty feet above the level of the stream, and which, on the Foulden side, are repeatedly cloven by deep and wild ravines, bringing down rills and drainings from the northern districts. After passing through the romantic Tibbie Fowler's glen, the company went on to Edrington Castle, and viewed its ruins which are in sore decay. Behind the cottages there is an old draw well, which, according to the popular idea, is fed by the Whitadder, the well having been sunk to the stream's level. It appears to be very deep, as several of the party threw stones down and it was a long time before the splashes were heard. Specimens of the common wall-flower and of wormwood grew in abundance here. After spending some time at this spot, the party divided; some of the members proceeding to Berwick by the turnpike road, while the remainder followed the course of the Whitadder till its junction with the Tweed, at the upper end of New Water Haugh, where a thunderstorm, which had been impending all the day, burst over their heads, and a heavy shower of rain fell, making them glad to reach Berwick in time for dinner. Several plants were picked up during the excursion. In Mr. Wilkie's pond *Acorus Calamus*, sweet flag, was seen growing along with the common water iris, and there were many patches of blue monk's-hood in the pasture, which had been left untouched by the cattle. *Hypericum hirsutum* grew in the wooded dell leading to the Tweed, and was attended by the beautiful beetle, *Chrysomela varians*. A woody gall of the *Cynips lignicola* was here picked from an oak. By or in the Tweed grew *Potamogeton perfoliatus*, *Scirpus lacustris*, *S. caricinus*, and *S. sylvaticus*; also, *Anacharis alsinastrium*. *Tanacetum vulgare*, was common on the bank, also viper's bugloss, marjoram, and figwort. Fine examples of *Vicia sylvatica* and *Hieracium murorum* grew near the end of Tibbie Fowler's glen. At the Bound road there was a clump of bad-smelling *Mentha sylvestris*. *Lychnis dioica* was very gay here, and sweet-briar grew on both sides. Further

down towards Canty's Bridge, *Solanum dulcamara* was noticed in a hedge; also the wart cress, *Coronopus Ruellii*, on the ground. *Allium arenarium* was coming into blossom below the confluence of the rivers. A profusion of *Barbarea vulgaris* grows at the junction. Owing to the decrease of the waters by the excessive drought, a white bleached line of *Ulva*, like so much dirty paper, bordered the Tweed on each side in such a manner as it had not done for many years. *Geranium pusillum* is still to be found in its old situation at Castle Hills. Another locality for it has been discovered in Holy Island.

Twenty-four dined at the King's Arms Hotel. Mr. James Brown, Kelloe House, and Mr. James Hastie, Edrington Castle, were proposed as members. A notice of a stork, *Ciconia alba*, shot in a bean-field at Scremerston, on the 5th June, was read—written by Mr. J. Scott, Rector of the Corporation Academy, who also sent a rough sketch of the bird. Mr. Milne Home exhibited a copy of the Ordnance Map of Berwickshire, on which he had laid down in colors the parallel ridges and kaims of the district, which nearly all run in one direction, and which he attributed not to glaciers, but to the operations of a sea that had once covered and finally retired from off the face of the country. Mr. Stevenson agreed with Mr. Milne Home in repudiating the glacier theory as being insufficient to explain these appearances. Professor Balfour addressed the meeting, and expressed the pleasure he felt in being present; he ought to have joined the Berwickshire Club long ago. It was the natural descendant of the Plinian Society, with which in his younger days he had been connected as an active member. He liked such walks; they gave a beneficial stimulus to all who could join in them, or meet afterwards and talk over the day's observations or acquisitions.

The Club held its third meeting on Thursday, July 30th, at St. Abb's Head. The day was highly favourable, and a large assemblage of members and their friends convened:

comprising, the President, Dr. Robson Scott; Dr. Francis Douglas and Mr. Jas. Hardy, Secretaries; Sir Walter Elliot; Drs. R. Hood, Charles Stuart, and Charles Douglas; Revs. P. G. McDouall, J. S. Green, J. Irwin, J. F. Bigge, W. L. J. Cooley, W. Stobbs, A. Davidson, D. Paul, P. Mackerron, Evan Rutter, and Beverley S. Wilson; Captain F. M. Norman, R.N.; Captain Gandy; Messrs. D. Milne Home, Robert Crossman, John B. Boyd, W. Stevenson, W. B. Boyd, Middleton H. Dand, W. Chartres, F. Russell, jun., Thomas Allan, Robert Romanes, Thomas Broomfield, Geo. L. Paulin, James Wood, A. Brotherston, F. Walker, R. Mitchell Innes, J. T. S. Doughty, James Brown, J. E. Stuart, Chas. Bigge, P. W. T. Warren, W. Thorburn, W. Playfair, and R. Fender.

After breakfast at the Anchor Inn, Coldingham, the members arranged themselves in three divisions. A party of botanists beginning at Mildean explored the coast as far as Coldingham Lough. They found an example of *Ranunculus hirsutus* in a corn-field, and *Potamogeton filiformis* in quantity near the edge of the Lough, a well-known habitat of the plant. *Nuphar lutea* was blooming in profusion at the time of this visit. A second party, conducted by Mr. Milne Home, began at the Lough and made their way eastwards towards Coldingham shore. They visited the British Camps near the Lough, where the outlines of very perfect hut circles are discernible on one side, and an open space for cattle on the upper half; and some outer works and walls, perhaps of old folds, on the north-east. They then proceeded to the double camp at Earnsheugh, where the cattle or flocks had a separate camp to themselves, in which there are no traces of the hut circles so prominent in the others. This double camp lies at the verge of a tremendous precipice on one of the highest cliffs of that wild coast. On the heights east of the lake, the rocks lie in separate, narrow, parallel, sharp ridges, with flat vale-like intervals, looking as if the projecting portions had been able to resist the excavating influences which had operated more

effectually on the material of softer consistency. The ridges themselves are much rubbed and planed, especially on the north-west exposures, as if some mighty force had battered and grated them down. There were also indications of striæ, which bore by compass nearly north or north-half-west; in this agreeing exactly with the striæ at St. Abb's Head and the Farne Islands. On a subsequent day, a grooved and polished rock face, such as marks the passage of glaciers or icebergs, was noticed on the edge of the cliff near Earnsheugh, not so high up as those triturated surfaces just alluded to; the boulder clay which had protected it from atmospheric action having fallen down and left it exposed. It faces the north-west. Two well-worn boulders were found among the parallel ridges, which must have come from a great distance, probably East Lothian. They were both varieties of basaltic green-stone, with large hornblende crystals. It was also afterwards ascertained that a very perfect fragment of *Stigmaria*, composed of sandstone, had been picked up on Harelaw, one of the St. Abb's heights, as if freshly detached from its receptacle and not at all rolled. Mr. Milne Home considered that these appearances had been occasioned by a sea standing 460 or 470 feet above the present level, over which floated icebergs loaded with debris and rock fragments, and mentioned various other concurrent instances from the district, which confirmed his views. The other members entered on their survey at Petticowick, at the extreme limits of the Head. A fine view is here obtained of the bold, rugged coast, sweeping away round in an irregular circuit till near Fast-Castle. James Melville commemorates the delicious spring of water still existing here; having in the reign of James VI., in June, 1854, when flying in an open boat from the power of his persecutor Arran, to the friendly shelter of Berwick, been obliged, by stress of weather and to conceal the boat for the night, to take refuge in this haven. After sore battling with the blast "it fell down dead calm about the sun

drawing laigh. To keep the sea in ane open little boat, it was dangerous, and to go to Dumbarr we durst not, so of necessity we took us towards St. Tab's Head, but we having but twa oars, and the boat slow and heavie, it was about eleven hours of the night ere we could win there: howbeit na man was idle, yea, I rowed myself till the hyde came off my fingers, mair acquainted with the pen nor working on an oar. Coming under the craig, we rowed in within a pretty little how betwixt the main and the Head, where easily going a-land we refreshed us with cold water and wine, and returning to our boat slept the dead of the night; but needed nane to waken us, for soon be the daylight appeared, three was sic a noise of fowls on the craig and about us, because of their young anes, that we were almost pressed to launch out."*

On the steep bank leading up from this secluded little bay, *Arenaria verna* was observed to be still in flower; also, the showy *Astragalus hypoglottis*; and some examples of *Asplenium ruta-muraria* were perceived in the rock fissures. It was found rather unsafe to rest on the thymy knolls at the top, as they swarmed with the yellow ant, *Formica flava*. The tips of the wild thyme tufts were to be distinguished by the profusion of the hoary pseudo-galls, produced by the larvæ of a mite, for which they furnish the breeding receptacle. The rock butterfly, *Hipparchia Semele*, started from its basking places on every little crag or sunny bank littered with stones, hovering and dropping down as uncertain as a withered leaf.

The birds, unfortunately, at the time of our visit, had almost all left their breeding places and gone to sea. A few of the guillemots, swimming in line, were still to be observed; and all was silent, except the clamour of the gulls, which haunt the Head all the year round.

The sites, so far as they were known, of the several small monastic establishments that once existed on the Head, or

* Melville's "Autobiography," pp. 169, 170.

the later chapels or oratories that replaced them, were duly examined; but the mere outline of these humble edifices, little embellished as they must have been, appeal to us chiefly by their associations with the past. Leaving the Hill by the footpath, the party held on, skirting some fearful precipices and jagged outlying promontories—the neck of one distinguished by a fine rock ruin that might have been the remains of a giant's castle—onwards to Coldingham shore. Here the brown outlying scattered rocks, with intervening channels of deep blue water, afford a pleasing view. Passing the “Sands,” the rocks were reached, below the Homiliknoll, where Prior Ærnald (whose tomb was discovered during the repairs of Coldingham Church) once held his baronial court. These rocks, which are Silurian, are much altered and burnt to a dun color, by contact with the igneous rock of St. Abb's Head. The walk terminated at the vitrified mass, popularly called the “Deil's dander,” the result of an attempt to convert this altered and limestone-like rock into lime. It was of course, a failure.

Forty-four dined in the Volunteer Hall at Coldingham. The following nominations for membership were made:—Mr. Robert Gray, Edinburgh, author of “The Birds of the West of Scotland”; Mr. Robert F. Logan, 4, Picardy Place, Edinburgh, the well-known entomologist; Mr. Philip W. T. Warren, M.A., Master of the Grammar School, Berwick; Mr. W. Willoby, jun., Berwick; Colonel W. Crossman, Royal Engineers, London; and Captain F. M. Norman, R.N., North Berwick.

Mr. Stevenson, of Dunse, read a paper on ice action in Berwickshire; and Mr. Milne Home addressed the audience in support of Mr. Stevenson's statements, and adduced the observations, which he detailed, that had that day been made in the vicinity of Coldingham Lough. Mr. Wood shewed a large whetstone and two spindle whorls made of slate, which had been found on the top of Mosilee hill, Gala-shiels; and Dr. Hood a very perfect triangular flint arrow-

head, or "elfshot," from the farm of Greenwood. Sir Walter Elliot had brought from Wolfelee, near which it had been picked up, an oblong slate implement, perforated at the two ends for insertion of a thong, which is said to have been employed to protect the wrist from the bow string. Mr. Brotherston was the bearer of some interesting plants, which will be recorded in the "Proceedings."

The fourth meeting of the season had been arranged for Bothal. The members assembled for breakfast at the Queen's Head Inn, Morpeth. There were present:—Dr. Robson Scott, President; Mr. R. Middlemas, Treasurer; Sir Geo. S. Douglas; Captain Gandy; Messrs. Brown and Arkle; Revs. Geo. S. Thomson, W. L. J. Cooley, W. J. Meggison, A. Jones, P. G. McDouall, J. F. Bigge, and E. L. Marrett; Mr. C. B. Bosanquet, &c. Visitors: Messrs. Blair, G. M. Tate, Bigge, and Kite.

After having partaken of breakfast, the members started for Bothal, taking the path through the woods down the valley of the Wansbeck. The scenery is rich, and varied by large masses of limestone rock, crowned with great forest trees. It was noticed in the deep still water near the mill, that the *Anacharis alsinastrum* was growing in great quantity. At about half-way between Morpeth and Bothal we came upon the massive ruins of a small square building, said to have been an oratory connected with the Church at Bothal. So lately as 1809 a great part of it was standing, as is shown in a drawing of that date in the possession of the Rev. M. Roberts, curate of Bothal, and exhibited to the members at his residence. During our walk, the Broomrape was looked for, but no specimen could be discovered, though at one time it grew abundantly by the banks of the river. The party proceeded onwards to the Castle. A massive gateway still exists, and some of the old walls have been repaired and it now forms a residence for the agent of the Duke of Portland, lord of the manor. Part of the outer walls, now in a fragmentary condition, also remain, and are

clothed with fruit trees of various kinds trained against them. The Castle is surrounded by productive gardens and orchards. The party, after this, proceeded to inspect the Church, under the superintendence of the Rev. M. Roberts. To chronicle decay is always a melancholy undertaking, but the wretched aspect of this ancient and venerable edifice is quite sufficient to produce a feeling of sadness in the beholder, such is its state of ruin and disrepair. Within the Church may be observed two recumbent marble statues of the fourteenth century, a male and female. The female figure represents the heiress of the Bertrams, who married an Ogle of Cawsey Park, and conveyed the manor of Bothal into that family. The male figure is that of Sir Cuthbert Ogle, who married the heiress. The present parish of Bothal—the Saxon *Bottel*, signifying a village, a mansion—consists of the parishes of Sheepwash and Bothal. The former place derives its name from small vessels having been in the habit of ascending the river as far as the ford or “Wash,” hence the name “Ship wash” corrupted into Sheepwash. The first authentic mention of Bothal is in the year 1166, when it was in the possession of Richard Bertram. A church was in existence in 1261, when Roger Bertram made a grant to John Sylvester, rector of Bothal, of a piece of land on both sides of Bothal burn. The members then visited the residence of the Rev. Mr. Roberts, and partook of his hospitality—a welcome refreshment after a hot walk. Mr. Roberts shewed, amongst other curiosities, a bronze spear-head and a bronze axe-head, in excellent preservation, which had been found in a field in Somersetshire; also, some interesting old books. A volume bearing the honoured name of Benjamin Franklin, printed by him at Philadelphia in 1744, was beheld with peculiar interest.

The party then began their return march to Morpeth, and varied the route by taking a path leading along the flat high ground lying above the deep valley of the Wansbeck. Although the aspect of the landscape generally is somewhat

bare and level, the fine masses of foliage from the lofty trees clothing the banks of the river, rendered the scenery pleasing and varied. Harvest operations were being carried on vigorously. The beautiful little plant, the scarlet *Anagallis arvensis*—the poor man's weather-glass—grew abundantly in most of the fields.

The party again assembled at the Queen's Head Inn, and there dined to the number of sixteen. Throughout the day the weather had been most favorable. After dinner, an interesting account of Bothal was read by Mr. Middlemas, which will appear in the Proceedings of the Club.

The only part of my duty which now remains is the nomination of my successor in the honorable office of President; and I have, accordingly, much pleasure in naming the Rev. J. F. Bigge, vicar of Stamfordham, as President of the Club for the coming year.

Notice of a Stork found near Berwick. By Mr.
JOHN SCOTT.

A RARE bird in this district was sighted first on Robertson's farm of Prior House, on the 10th of January, 1874. It was followed from this farm to Heathery Tops and thence to Scremerston farm, where it was overtaken by James Barnes (overseer of Scremerston Colliery), and shot in the leg and very slightly in the body. The bird was then captured, and discovered to be a White Stork (*Ciconia alba*). The capture came to the notice of the secretary of the museum, who, after some little negotiation, secured it for the collection in Berwick. The bird is fully grown, and measures upwards of 4 feet in length, 7 feet in expanse of wing, and stands 2 feet 11 inches in height. The bill is 8½ inches in length; the tarsus measures 10½ inches; and the bare part above the knee, 5 inches. The plumage is entirely white, with the exception of the great wing coverts, the secondaries, and tertiaries, which are black; the beak and legs are red.

Obituary Notices.

REV. WILLIAM PROCTER, B.A.

THE Rev. William Procter, B.A., the only son of our venerable member, the Rev. William Procter, Vicar of Doddington, was born at that place on the 13th November, 1839. He was educated at home to the age of fourteen; then at Durham Grammar School, where he became head-boy; and then at Christ's College, Cambridge, where he took good places in his college examinations. He was ordained as curate of his native parish in 1865; was married to Miss Isabella Gilchrist, of Berwick, in 1867; removed to be curate of Tynemouth in 1868; and thence, on the death of the vicar, to Seaham Harbour. He returned to Doddington, a widower without children, in 1869, where he zealously devoted himself to his pastoral duties till three months before his death; when a lung disease, brought on by over-exertion and exposure in the discharge of those duties, compelled him, unwillingly, to cease from his work and try the benefit of a milder climate. He died at Budleigh Salterton, in Devonshire, 30th January, 1874. He was buried in Doddington Church yard, where a tombstone to his memory has been erected, with this inscription:

“ WILLIAM PROCTER, B.A.,
Curate of Doddington,
Born 13th November, 1839;
Departed this life, 30th January, 1874.

Learning of JESUS,
He was meek and lowly in heart,
And went about doing good,
His faith working by love,
and
He rests from his labours.”

In addition to the tombstone, the inhabitants of the parish (every one contributing) have recently put up a handsome memorial window in the Church—“The Good Shepherd”; and his friends not resident in the parish have put up another—“Christ blessing little children”—both inscribed in affectionate remembrance of the departed. These are accompanied by a brass placed on the wall, with this inscription:

“To the Glory of GOD, and
in Affectionate Remembrance of WILLIAM PROCTER,
jun., B.A., Curate of this Parish, this Brass, with
Two Memorial Windows, are dedicated by his Parish-
ioners and Friends,

1874.”

Mr. Procter is a great loss to the Club. He was energetic—a good scholar—a poet of no mean order—and a most willing worker. As a friend and as a pastor he was generally beloved. He was not sufficiently long connected with the Club to do more than he has accomplished. He has left us a very complete account of his native parish, at vol. vi., p. 146 of the “Proceedings,” and he had commenced a similar sketch of Chatton, which he did not live to elaborate. Two of his sermons have been printed for private circulation. Mr. Procter had bestowed no little time and attention on a subject to which the Club has devoted some of the best of its pages—the British rock markings, which are so numerous scattered among the rocks in the hilly tracts round Doddington. The sites of these he had proposed to lay down on the Ordnance map, to serve as a permanent index. It may not be known to the Club the pains he took for the preservation of the best of these rude monuments, by having them protected from the atmosphere; and this done in such a manner that the covering of light sods might easily be withdrawn when inspection was necessary. If he could supply any information to his friends, he spared no exertion in procuring it for them.

HENRY STEPHENS, ESQ., F.R.S.E., &c.

Mr. Henry Stephens, the eminent agricultural writer, died at Redbrae Cottage, Bonnington, Edinburgh, July 5th, 1874, aged 80. Mr. Stephens was one of the few old members of the Club who still continued to take an interest in its operations, having been elected 12th September, 1849. He joined the Club when visiting the district as a Drainage Commissioner; an early and very important part of his life having been passed in Berwickshire. While still young Mr. Stephens betook himself to agriculture with the utmost enthusiasm, and to the last his devotion to his favourite topic never intermitted. In the early editions of his “Book of the Farm,” he narrates that after receiving a liberal education at the parochial and grammar schools of Dundee,

and subsequently at the Universities of St. Andrews and Edinburgh, he boarded himself, with a view to learn farming, with Mr. Brown, one of the largest and most skilful farmers in the county of Berwick, which had then the repute of being the best-farmed district in Scotland. On this farm—Whitsome-Hill—Mr. Stephens remained three years, engaging with his own hands in “every species of work which the ploughman, the shepherd, and the field-worker must perform in the field, or the steward or cattle-man at the steading; and even in the dairy and poultry-house part of his time was spent. All this,” he adds, “I undertook, not of necessity, but voluntarily and with cheerfulness, in the determination of acquiring a thoroughly practical knowledge of my profession.” On the overthrow of Napoleon, Mr. Stephens went abroad with the view of familiarising himself with Continental agriculture, and visited most of the countries of Europe. Returning home, he proceeded to apply his knowledge to practice on his own estate of Balmadies, in Forfarshire, selecting a farm of 300 acres. The result of his improvements was that the farm, for which not more than £150 rent was offered before it was taken in hand by Mr. Stephens, in a few years let for £400.

About forty years ago, Mr. Stephens removed from Forfarshire, and took up a permanent residence in the suburbs of Edinburgh, where he busied himself in preparing those works on which his fame rests. The first edition of “*The Book of the Farm*” was issued in 1842; and so lately as 1871, Mr. Stephens, at his then advanced age, brought out a new edition entirely recast, and in great part re-wrote the work, in order to bring its contents up to the latest developments of practical agriculture. Several editions were printed in America, and the book has been translated into nearly all Continental languages. In conjunction with Mr. G. H. Slight, he published “*The Book of Farm Implements and Machines*,” in 1858; and in 1861, assisted by Mr. R. Scott Burn, “*The Book of Farm Buildings*”; and in 1867, completed this series of valuable works by joining Dr. William Sellar in producing “*Physiology at the Farm*.” Mr. Stephens was likewise author of a “*Manual of Practical Draining*,” an “*Essay on Yester Deep Land Culture*,” and a “*Catechism of Practical Agriculture*.” For many years he edited the “*Quarterly Journal of Agriculture*,” and for some years also

the "Transactions of the Highland and Agricultural Society." He became a member of the Highland and Agricultural Society in 1826, and for many years was one of its Council.

"For some months previous to his death, Mr. Stephens was prevented by increasing age and infirmities from carrying on his literary labours. But in intimate conversation with those friends who delighted to visit him in his retirement, his intellect shone bright and clear as ever. His interest in passing events, in politics, and in contemporary literature, never flagged. The laws of hospitality were ever, though modestly, revered by the kind old man; who, conscious of not having lived in vain either for himself or his fellows, patiently and with the utmost cheerfulness awaited the close of his long life and assiduous labours."

[Messrs. Blackwood & Son kindly furnished a printed Memoir, of which this is an outline.]

WILLIAM SMELLIE WATSON, ESQ., R.S.A.

Mr. William Smellie Watson, a well-known member of the Royal Scottish Academy, and one of the few survivors of the band of artists who originally formed that corporation, died at his residence 10, Forth Street, Edinburgh, 6th November, 1874, aged 77. Mr. Watson has been twenty-four years a member of the Club, having joined it on the 12th September, 1850. The deceased painter was the son of Mr. George Watson, the first President of the Royal Scottish Academy, and cousin of Sir John Watson Gordon. His mother was a daughter of Mr. William Smellie, the printer—well known as the friend of Robert Burns—author of "The Philosophy of Natural History," and of a translation of "Buffon's Natural History"; who also originated the "Encyclopedia Britannica," as well as many other important and useful undertakings for the increase of knowledge and the benefit of society. Mr. Watson was born in Edinburgh, where he received the first rudiments of his art education at the Trustees' Academy. He afterwards prosecuted his studies in London, where he enjoyed the friendship of Sir David Wilkie. He returned to his native city, where he was soon established in good practice as a portrait painter; his portraits being specially remarked for their excellence as likenesses, while not without attractive qualities of colour. During a successful professional career

of nearly sixty years he was a regular exhibitor on the walls of the Royal Scottish Academy, and two works from his pencil were hung there last spring. Mr. Watson occasionally varied his practice by painting what might be considered as a sort of fancy portraits, such as "An Ornithologist" among his birds, or "A Conchologist" surrounded with shells. He inherited, through his mother, an earnest taste for certain branches of natural history, more especially ornithology; having in the course of his long life got together a remarkable collection of specimens, which he took great delight in displaying to his friends. His series of eggs, so far as British birds were concerned, was nearly complete. "As a man," says one who knew him, "William Smellie Watson was one of the gentlest and kindest that ever breathed. He was never known to say an unkind word of anybody; and not only by his professional brethren, but by all who came into contact with him, he was regarded with respectful affection."

REV. GEORGE ROOKE, M.A.

The late Rev. George Rooke, M.A., vicar of Embleton, and Hon. Canon of Durham, was born at Lymington, Hants, in 1796, and was the last surviving son of Mr. Justice Rooke. He was educated at Charter House, and then went to Haylebury (being intended for the Indian Civil Service), but afterwards entered at Merton College, Oxford, where in 1817, he graduated, was elected fellow, and presented to the living of Woolvercot, near Oxford. In 1830 he was made vicar of Embleton. The restoration of Embleton Church, in 1850, was done under his direction. He was appointed Hon. Canon of Durham in 1852. He joined the Berwickshire Naturalists' Club in 1845, and was chosen President for 1854. His Anniversary Address for that year (Vol. iii., p. 161) is the only contribution that he ever made to the "Proceedings" of the Club. Mr. Rooke died at Embleton, on the 17th of August, 1874, of congestion of the lungs, after a long and painful illness. The Club will sympathise with an affectionate tribute to his memory, contributed by Ralph Carr-Ellison, Esq., of Dunstan Hill, one of his oldest and most intimate friends.

The memory of our late valued friend, Mr. Rooke, of Embleton, is too fresh and vivid for me to hope to strengthen

its hold upon us by any general reference to his character, whether as a clergyman or a neighbour. We all feel that rarely has so kindly, manly, and sympathising a presence, ever hearty and ready to greet us, helped to cheer our way through life. It is rather certain special accompaniments and results of his warmth and breadth of sympathy with all around him that claim attention, as an example to such of our younger readers as may be called into new positions and new scenes. I well remember Mr. Rooke's early years at Embleton, whilst the parish and neighbourhood, nay the whole North of England, were yet new to him; with what delight he entered into the feelings and expressions of the hinds and fishermen of his parish, which he had but recently learnt to know from their own lips. As an accomplished classical scholar, fresh from the society of Oxford, he perceived at once the archaic interest of much in our local Northumbrian idioms. In immediate connection with it, the popular lyric poetry of Burns became his favourite resource; and in our long walks or rides about his parish, or in my own country-side at the foot of the Cheviots, he would ever and anon bring out some passage of striking beauty or of quaint and original humour, from his cherished author of Scottish song. When without a companion he was never for a moment alone, because he could enter into the human sympathies of all around him, from highest to lowest. He was a good Italian as well as a classical scholar, and was rich in reminiscences of travel and of early familiarity with the sea, on the coasts of the Channel and in the Mediterranean; experience, which was a strong bond of union between him and his maritime parishioners at Newton and Craster. Often have I walked to visit them with him, and marked the welcome he received from the very bairns when they saw him coming. Few were the mornings, summer or winter, that he did not walk down the Sea Lane of Embleton, before breakfast, to bathe from the sandy links along the surf-beaten coast, and to take a short swim. Once his life was nearly lost; the surf dislocating or violently straining one shoulder, when no one was near to help, but with difficulty he swam ashore with one arm. Yet he soon resumed the habit of bathing and swimming. In horse exercise, also, he took great pleasure formerly, to visit many a friendly mansion and homestead.

As a clergyman and a preacher he possessed a simple,

direct, and almost conversational eloquence, which was always greatly appreciated by attentive auditors, though not perhaps so likely to rouse the heedless. The matter of his teaching was always, I think, eminently practical and instructive. His mind being highly appreciative of elevated and figurative language, his Biblical reading and enunciation were ever appropriate and beautiful, and the cadence perfect. Of music, whether sacred or not, he had a natural and acknowledged appreciation and masterly judgment; and musical talent is hereditary among those whom he has left to inherit his name and example. These simple annotations explain the mental activity which enabled my lamented friend to do what very few Englishmen probably have accomplished at his period of life. For, being ordered to Germany by his physician, for his health, when advancing age was already gaining visibly upon him, he applied himself to the rich and picturesque, but certainly not facile, language of the Germans, and to its grand dramatic literature, with signal success; thus manifesting the command of language in general conferred by the possession and enjoyment of the Latin and the Greek. Ere long I found my friend quoting from Goethe with all the zest which he had formely bestowed upon Burns; and right able to make his own way from Cologne to the Carpathians, if needful, without an interpreter.

The favourite ramble with my old friend was to Dunstanborough Castle, after his home occupations of the morning were over. And as we started—accompanied by some faithful canine attendant—he would decline such a staff as I was wont to carry and take only a switch, when he would cheerily cite from Juvenal—

“Dum pedibus me

Porto meis, nullo dextram subeunte bacillo.”

The beautiful Parish Church of Embleton has been worthily restored to its pristine worth under the presiding care of its deceased and ever venerated pastor. And a new chancel, enriched by graceful decoration, was added during the same period by the Warden and Fellows of Merton College.

Ever treasuring the little kindly thoughts and words of his flock, my friend, while still in his early activity, related to me how a poor little girl from Embleton fell sick and sank under a pulmonary malady at Rennington. The latter

village was at that time bleak and naked, though not so now. He told me how the child had begged of him to let her be laid at Embleton, for there were "nae bonny trees" at Rennington; and he carefully saw to her wish. He, too, has now been gathered in his earthly form, beneath the fair elms and sycamores beside the Church where he ministered for more than forty years. Let us be thankful for the memories he has left us—simple, endearing, and sterling as his own friendships of the past.

RALPH CARR-ELLISON.

MR. JOHN CHARLES LANGLANDS.

The death of our late friend, Mr. J. C. Langlands, was noticed at our last anniversary meeting, but as it will be a gratification to members to have preserved a more detailed memorial of one so much regarded, the following notes have been prepared.

When a youth of seventeen, Mr. Langlands went to study farming with Mr. Jobson at Chillingham Newtown; and in 1823 he became the tenant of Old Bewick, where he continued to reside till his death, 11th March, 1874. He was elected a member of the Berwickshire Naturalists' Club at the meeting held at Yetholm, on the 25th June, 1857, and he continued to the last to be one of the most regular attendants of its meetings. He was elected President of the Club for 1859; and in his address delivered in September of that year, he gave much instructive information on the history of the Priory at Coldingham, and the early ecclesiastical sites on the neighbouring rocky headland, while in some of his concluding remarks we can trace his taste for natural history and his habits of careful observation. In May, 1866, the Club held a meeting at Eglingham and Old Bewick, when Mr. Langlands read a paper on the "History and Natural History of Old Bewick," which may be commended as a model of cautious statement and careful research. On this occasion he had to guide the members to two remains at Old Bewick, both of which had long been objects of interest to him in different ways, namely, the sculptured rocks on the summit of the hill and the Norman Chapel at its base. We should not have learned from the remarks which Mr. Langlands made on the former that the sculptures had attracted his attention about forty years before, and that, as Mr. Tate has recorded in his memoir on

these sculptures, *he* may be regarded as their discoverer. After these mysterious figures had become, as it were, fashionable and the subject of general interest, many students were drawn to visit them, and these pilgrims cannot but recollect the zeal and interest exhibited by Mr. Langlands, who was the unfailing guide on these occasions.

The Norman Chapel had roused his interest at an early time, and its restoration was the cherished vision of many years. In 1857, he communicated to the Society a minute architectural report on the ruins, which had been prepared for him by Mr. Hardwick, of London, and which was illustrated by historical references from the stores of Dr. James Raine, of Durham. Years before this time, Mr. Langlands had begun to collect subscriptions from sympathising friends towards a restoration fund, and he was himself a large contributor to it. When, therefore, the way was at last opened for the realization of his hopes, through the cordial and energetic co-operation of the Venerable George Hans Hamilton, vicar of Eglingham and Archdeacon of Lindisfarne, no time was lost in commencing the work, and at the time when the visit of the Club occurred, Mr. Langlands thus wrote of the Chapel: "A second restoration has now been commenced, and will be conducted under the directions of Mr. P. C. Hardwick, after a careful study of the original, and every stone replaced that still remains on the ground. The pure archæologist may perhaps be disposed to sigh over the loss of a picturesque ruin; but those who have witnessed the ravages which *time* and *wanton destruction* have recently made, will rejoice that this choice relic of Norman Christianity is to be rescued from becoming an unsightly heap of stones, and once more dedicated to God's service." This consummation was happily effected in September, 1867, when divine service was first celebrated in the restored Chapel, as it has been continued to be performed since that time, by the clergy of Eglingham.

Perhaps no event in the life of Mr. Langlands gave him a more real satisfaction than the sight of this finished work, which in its progress he had watched with untiring care from day to day. He had buried his wife near the walls of the old Chapel, as if to add another pledge to the motives which made him yearn to restore the waste places; and when he himself was laid to rest beside the hallowed grave, the shadow which fell on them both was the completed outline of his favourite shrine.

While the life of Mr. Langlands was marked by no striking events which could fill the public eye, yet his removal has created a blank widely felt by many. As a friend and as a neighbour he was ever warm and true—in his intercourse with men of very varied rank, retaining the respect and esteem of all. His genial and unexact nature made him eminently what Dr. Johnson calls a *clubbable* man; and the many ways in which he contributed to the enjoyment of the meetings of our own Club, must be fresh in the minds of all who attended them.

JOHN STUART.

On supposed Lake or River Terraces, near Kelso.

Communicated by Mr. THOMAS CRAIG.

THE town of Kelso is situated in a valley through which the river Tweed flows with easy current, approaching the town in a southerly direction, and then (shortly after receiving its tributary, the Teviot) sweeping away eastward. About a quarter of a mile to the north of the town, as well as for some distance above and below it, the ground rises somewhat abruptly, and presents the appearance of having been at one time the bank of a river or lake. When any excavations are made in the streets, gardens, or fields in or adjoining the town, it is usual to come upon extensive layers of sand-mixed gravel and sometimes upon beds of pure sand, which is much valued for building purposes. These often occur at no great distance from the surface. These features and characteristics are familiar to all observers; but there are certain peculiarities connected with what may be termed the northern embankment of the ancient lake or river, which appear to deserve the attention of geologists. The eye of a stranger can scarcely detect these peculiarities by reason of the stately beeches and other trees now growing on the "brae face," which were planted many years ago by a former Duke of Roxburghe. But when one enters the Angroflat Plantation, as it is termed, and walks along from near the Edinburgh turnpike to the road at the Pipewell Brae, one finds that at short

distances from each other, there are a series of raised platforms, or terraces, sometimes running in an almost straight line from the bottom to the top of the acclivity, and sometimes with a slight curve, but generally leaning a little westward. The ancient river or lake bank for the distance indicated above, faces south-west and south, while the platforms, or terraces, present their fronts in a westerly direction, running upwards for a distance of between seventy and eighty feet. Supposing a great river at one time to have swept through the vale of Kelso in the same direction as the Tweed, these terraces would have opposed themselves to its current. When viewed from a distance, these swelling hillocks resemble heaving sea-billows chasing each other transversely along the shore.

In a distance of about half a mile there are fourteen or fifteen of these terraces of different heights. On entering the Angroflat Plantation, the first to present itself will measure from three to four feet on the face of the slope, which lies at an acute angle. This is succeeded by one of smaller proportions; but the next rises nearly as high as the first. Crossing the statute labour road, where there has been a considerable cutting in the course of its formation, there has been a steep declivity facing eastwards, which is different from all the rest. After crossing the road there is a very gentle slope for a greater distance than occurs elsewhere, until the next west-fronting terrace is reached, the slope of which is perhaps the most considerable of the series, and will rise to about eight feet. The next diminishes a little in height, and may not exceed six feet. The remaining one is about the same height as the last, and in the interval between them the ground presents a very ridgy appearance, as if it had been cultivated and laid off in narrow ridges previous to the trees being planted. There are distinct traces of these ridges of cultivation as one proceeds eastward, but here they rise higher at the centre than at other places. Proceeding farther along, the next terrace has also, about six feet of slope, and this is succeeded by two which rise to little more than a ridge, then by one about two-and-a-half feet, and next by one between three and four feet. There are four or five other terraces, measuring from two to four feet on the slope, between some of which the ridges in which the ground has been laid off for cultivation are very distinctly marked in regular succession.

All along the foot of the lake, or river, bank, the ground is of a marshy description. The Duke of Roxburghe already mentioned carried out extensive draining operations upon it within the memory of persons still living, and it is recorded in several valuable reports connected with Kelso Dispensary, prepared by Dr. Charles Wilson (formerly of Kelso, but now of Edinburgh, whose pen has supplied several able and learned contributions to the "Proceedings"), that cases of ague, which had formerly been of frequent occurrence, had entirely ceased after these and later draining operations at the Berry Moss (now the race course) had removed the last of the stagnant morasses of the district. It may also be mentioned that at a broken portion of the retaining wall at the road which cuts in two the Angroflat Plantation, it was recently noticed that under a deepish layer of red sandy clay there was the usual sand-mixed gravel commonly found in digging operations in the town.

I shall not venture to offer any speculative theory as to the origin of these phenomena. But it would be very interesting and desirable were some competent and experienced geologist to visit and inspect them. I have no doubt they will be found to have some connection with the sand hillocks in the grounds of Floors, which attracted the attention of Mr. Milne Home on the occasion of the Club visiting Kelso in September last, and to which he adverted in the course of some remarks at the dinner, at the same time inviting the attention of local observers to the subject.

Note on the Oyster-Catcher. By Dr. ROBSON SCOTT.

A SPECIMEN of *Hamatopus Ostralegus* (the Oyster-Catcher) was shot at Belford, on the Bowmont, on 15th September, 1874. This bird is not uncommon on our sea-coasts, but has very rarely been found inland. Sir W. Jardine mentions one as having been shot at Dryburgh. This bird is remarkable for its stout, wedge-shaped beak, which it inserts into the shells of strong bivalve fish, such as the oyster, when slightly open, and wrenches them asunder. The beak in this specimen, when shut, was covered with mud for about half its length, indicating that it had been searching for insect food in the soft mud about the banks of the stream.

On Jedburgh Pears. By Mr. JAMES TATE.

IN a little nook of the tortuous vale watered by the crystal Jed, part of it on the level close to the water, and part on the sloping ascent towards the hills, is situated the town of Jedburgh. The vale is narrow, and the haugh land of small extent, so that a good portion of the houses are set in the face of steep banks, and the gardens suggest some idea of what the hanging gardens of ancient Babylon may have been. The town itself has many features of curious interest. It has the ruins of an abbey, in which lived in other days a colony of monks; and some of the Jethart Pear trees are believed to have stood from a period before the Reformation. It had a strong castle at the highest part of the town, and some of the old mansions were in the form of Bastile houses, the defensive character being requisite as a protection against the English invaders. The most interesting specimen of these houses now remaining is one in which Queen Mary lay sick for some time after her ride of fifty miles over moor and moss to visit Bothwell at Hermitage Castle, when he had been wounded by the banditti of Liddesdale. It is one of the few good houses now remaining in the burgh that has a thatched roof.

But our present object is to notice Jethart Pears, and not to give a description of the town. The pears are referred to in all historical notices of the town. In 1773, Dr. John Walker writes from Moffat to Lord Kames, that "there is more fruit about Jedburgh, and more fruit-bearing wood upon the trees, than I have seen in any other part of Scotland." In the "Agricultural Survey of Roxburghshire," written by Dr. Douglas, of Galashiels, and published in 1798, the author refers to Kelso, Melrose, and Gattonside, along with Jedburgh, as being noted for their orchards, but adds, "Jedburgh has long been famous for its pears. The best kinds there are the Lammas or Crawford, the Auchan, and the Longueville. The two last, especially, are much valued, and are in great demand over a large track of country," They formed, when Dr. Douglas wrote, a considerable article of commerce, and in some seasons the produce was incredibly great. Both at Melrose and Jedburgh there were then some very old trees, supported by props, but still very prolific. The Doctor says in a footnote; "A single tree of the Thorle Pear at Melrose, has for

these fifty years past yielded the interest of the money paid for the gardens where it stands and for a house let at £7 yearly. Another tree has carried fruit to the amount of £3 sterling annually at an average for the same period. In the year 1793, two trees there brought to perfection about 60,000 pears, which were sold for eight guineas.”*

In a work “On the Gardens and Orchards of Scotland,” by Mr. P. Neill, drawn up for the Board of Agriculture in 1813, there is the following reference to Jedburgh Pears:—
 “It may be remarked, as a curious fact, that in Scotland there are many more of the fine sorts of French Pears to be found in ordinary gardens, than in England. This is probably to be ascribed to the early introduction of these kinds by the rich and luxurious clergy; for the monkish establishments in Scotland were in general more splendid and more magnificently endowed than those of England.”†
 “The oldest of the Jedburgh orchards having been originally laid out by the clergy during the flourishing state of the Abbey, there still remains a number of very old trees, chiefly pears of French origin. They are generally of a large size; several are from thirty to forty feet high, with huge trunks and wide-spreading branches. One tree, a Red Honey Pear, is of pre-eminent bulk, rising between fifty and sixty feet, with a bole measuring nine feet in circumference. Many of the oldest trees are now, however, much decayed, and supported with props; but even in this state they sometimes carry great crops. The kinds are the Auchan, Longueville, Crawford, Lammas, Warden, Bonchretien, Bergamot, Gallert, and Jargonelle. Of these, the Warden has most successfully stood the ravages of time; or, at least, it proves most prolific in its old age, a single tree of this sort having been known, in favourable seasons, to produce from thirty to forty bushels. The Warden is, however, only a baking pear, and consequently does not bring much money at the market; for in Scotland pears are in general considered as dessert, not as kitchen fruit. Some of the Bonchretien trees are likewise of great size, and in tolerable preservation: they produce good crops, but the fruit is of inferior size. Besides those kinds which have been mentioned, Jedburgh orchards contain the St. Catharine, Green Chisel, Drummond, Grey Gudwife, Pound Pear, Green Honey, Mother Cobe, and Green Yair. When some of the

* P. 117.

† P. 125.

ancient trees have perished and been rooted out, they are found to have been planted on a paved bottom. When young pear trees are planted in the sites of those that have died, they invariably get cankered, and entirely fail in the course of four or five years.”*

In a paper communicated many years ago by Mr. Thos. Shortreede to the “Transactions of the Caledonian Horticultural Society,” a list is given of the kinds of pears still existing, or known to have existed, in the orchards of Jedburgh, of which the following is a copy:—

Grey Longueville.
Green Longueville.
White Warden, or Monk’s
Pear.
Grey Warden.
Drummond, Grey and Red.
Musk Pear.
White Achan,
Grey Achan.
Pound Pear.
Grey Goodwife of Glasgow.
Rob Hyal.
Worry Carle.
Bell-tongue Pear.

Scots Bergamot.
Crawford, or Ballencrieff
Pear.
Lady Lamont.
Grey and Red Honey.
Douglas Pear.
Mother Cob.
Fair Maid.
Pitfirrane.
Bon Chrétien.
Ludd Pear.
Buchanan Pear.
Cranstoun Pear.

We have already spoken of the steep banks on which some of the gardens are situated, and that probably tends to help the growth of fruit by the radiation of heat, but the soil is likewise uncommonly deep, and the roots can go ten feet downwards without exhausting the nourishment. The pears have long been famous, and Jedburgh Pears have been sold in the streets of London. In Newcastle-on-Tyne it was common to hear the cry of “Fine Jethart Burgundy Pears.” The name should probably have been Bergamot, a variety of pear said to have been introduced by the Romans, and still a favourite in the town, but the wood is liable to canker. Of the ancient kinds there is one called the “Worrycarle,” of which no specimen remains in Jedburgh, but there is, or lately was, one at Ancrum, three miles distant. The trees are said to have been extremely prolific, but the fruit was so woody as to be uneatable, and, after long keeping, the pears had to be boiled like potatoes before being used. Tradition says that on one occasion a Jedburgh

market gardener took a cartload of Worrycarles across the Border to a fair at Wooler, and the country people readily purchased the Jedburgh Pears, but as the honest burgher trotted homeward in the evening he was pelted all along the road by the disgusted purchasers, who had tried in vain to masticate the hard knots of pears. Mr. Deans, nursery and seedsman, relates that his father once had a large quantity of the Worrycarle Pear in his possession, which he laid past in a corner of the stable, and there they lay for twelve-months without any apparent change; their dusky-green colour being nearly as fresh as when they were taken from the tree. As they continued hard and insipid, he thought of boiling them, after which they became very eatable, and, as Mr. Deans says, "as sweet as honey." This seems to confirm the idea that the monks used the pears as a staple article of food, just as we now use turnips and potatoes; and for that reason they chose a kind which was sure to produce a crop even in the worst of seasons. Thus they would be valuable articles of food at a time when the means of subsistence were not over-abundant.

Another Pear that nobody now cares to cultivate, but that grows in great abundance and never fails a crop, is the Warden, or Monk's Pear. Like the Worrycarle, the Warden used to grow in great abundance at Jedburgh, and seems to have been much used, as "Warden pies" are mentioned in history as common articles of diet. It is said that in the beginning of this century, when carriages were generally performed on the backs of horses, the Newcastle carrier kept five horses constantly employed for one season, carrying to Newcastle pears of the White Warden, the produce of one orchard alone, and that not the largest in the town. The Grey Warden is a coarse and harsh pear; but the White Warden is of more value, as it often bears a good crop when other sorts fail, and in a good season is not only large and handsome but really of good quality, being mellow and and pleasant tasted when pared. It possesses the quality of never chilling the mouth when eaten in cold weather, like the Achan and other juicy pears. In the Lady's Yard, a garden not far from the Abbey, and called in old title-deeds "the Convent yards of the Monastery," are two specimens of Warden trees which are worthy of notice. One of them is near the house of Mr. William Hilson, manufacturer, who, in the spirit of a true lover of Nature, has taken precau-

tions to preserve its historic interest as far as possible. As it stood originally, the tree must have had a thick trunk, but in its present prostrate and decayed form measurement is impossible. It had, at some period in the distant past, fallen over, but from the prostrate trunk another tree had grown a few feet to the eastward of the parent root; this again had fallen, and the end of the stump is easily seen where it has been cut across, while a third tree has grown up from the ruins, and that is now an old tree tottering to its fall, but carefully propped, and still in old age bearing abundant crops of fruit. From the original to the present root is a distance of about fifteen feet, and that consists of decayed trunks, out of which, however, new shoots are at present springing. The pears are hard and green, very well shaped, and forming a neat point at the junction with the stalk. At a short distance is another tree, which in a similar way has travelled about twenty feet. At one extremity is a Warden Pear tree, and at the other end, where the original stock had been, there has sprung up an Achan Pear tree. It is said that one of these trees measured eight-and-a-half feet in girth before it had fallen down. It has been noted as a curious circumstance about one of these trees, that when split by a storm of wind, a large iron bolt was found in the heart of it, which had probably been used formerly to keep the trunk together, as it appeared to have been previously split in a similar manner. The wood had grown over the iron for many inches at both ends.

Along the north side of the town is a locality called "the Friars," where some gardens belonging to the monks have been situated, and in which are some old pear trees. In the Friars' orchard is an old Longueville tree, a kind of fruit which some authorities have considered to be identical with Hampden's Bergamot, but which is in reality quite different. The tree in Friars' orchard has originally had a thick trunk, but some years ago it was all blown over except one small limb, which continued to grow, and has this year a large crop of fruit. The pears are of moderately large size, thick and short in form, green in colour, and rough in the skin, but not yet ripe. In the same orchard there is a Hessel Pear tree, the first introduced into the district, and which came direct from Hull when the species was imported from the Continent. The tree is not very well grown, and Mr. Deans has a better specimen in his

nursery. The fruit is turbinate shaped, of rather small size, but tender, sweet, and juicy, with a pleasant aroma. It is ripe in October. In the same orchard is a specimen of the Summer Bon Chrétien, upwards of one hundred years old, but there is not much fruit on it, and it is a kind which is always shy and precarious in the district. The St. Catherine Pear is here represented by a tree eighty or ninety years old, the pears on which are small, reddish, and sweet to the taste.

In various gardens around the town are large and fine pear trees, some of which are worthy of a passing notice. In the garden of Mr. Brown, grocer, is an old tree of a kind called "Ludd," the only one of its kind now grown, which bears always a fine crop of turbinate shaped, fair eating pears, though not equal to some of the more modern sorts. In the Burn orchard, belonging to Mr. Ormiston, is a large specimen of the Grey Warden, an old tree, but not nearly equal in age to those at the Lady's Yards.

Near the Nest Academy are two specimens of the Grey Achan, of very large size and bearing great crops. These are sometimes called Black Achans and sometimes Red Achans ; but the truth is the colour changes with the age of the fruit. It may be observed that this species forms an excellent dessert pear in Scotland, where it grows plentifully, hangs on the tree till all the leaves are off, and will scarcely part from it even then, and is in season in the months of November and December ; but in the south of England it is worthless. In the manse or parsonage garden, close to the Abbey, are some grand trees, but the most notable of them all was a celebrated Plum, called Cloth of Gold, which was broken by a storm some years since, and has been replaced by another many degrees inferior. In a little sheltered corner of a garden, where Queen Street meets Canongate, is a very old Longueville, belonging to Mr Geo. Hilson, manufacturer ; and in the same place is a noble specimen of the French Jargonelle, a favourite pear in the town, and which grows in great perfection. Having measured this particular tree, we found it 7 feet in girth and 6 feet high from the ground to the first cleft ; the tree is about 50 years old, in perfect health, and finely developed, and is the parent of all the French Jargonelles in the town. In a garden adjoining the above, between the High Street and Queen Street, is a specimen of the Green Yair, the only one

in the town, which seems surprising, as it is generally considered a good Scotch pear, tender, juicy, and sugary, but below medium size. Another notable tree in the same garden is a Green Honey, very large and prolific, and the parent of all others of the same species in the town. On the opposite side of Queen Street is "the Palace," as the former residence of Queen Mary is called, and connected with it is a garden filled with magnificent trees. It is nearly quite level, and extends from the street to the margin of the Jed. At the west end of the house is an enormous tree of what is called the Buchanan Pear, but whether that means Buchanan's Spring Buerré, or how it has got the name, nobody seems to know. It covers more ground than any pear tree we ever saw before, and its spreading limbs are supported by three sturdy props. We noticed a Longueville which shows how life may be prolonged amid decay, for the trunk is entirely worm-eaten, only a shell remaining, and yet a limb, which seems like to fall by the weight of its fruit, has grown out from one side, as if it were a graft set into the tree, and is green, flourishing, and uncommonly fruitful. Near the river side is a large specimen of the White Warden Pear tree. In the paper communicated to the Caledonian Horticultural Society, a tradition is quoted, to the effect that a White Warden tree in that garden was blown over in a storm in 1603, on the night when King James VI. crossed the Border into England. "It had five principal clefts or branches, which all touched the ground nearer or farther from the trunk, and each in process of time took root and became a separate tree. A clump of three of these is still standing, and in a fine bearing state; a fourth existed three years ago."

No visitor should be in Jedburgh and not see Mr. Deans at the Anna Nursery. Not only can he tell everything of interest that has happened in the town for upwards of sixty years, but he knows all about the gentlemen's country seats in the neighbourhood, and in his own conservatories and grounds there is much worthy of notice. In the course of a long and active life he has not only carried on a good nursery and seed business, but has made experiments and has several fruits bearing his own name. We notice specially an Apple called Deans' Gold-finder, a seedling having what we consider excellent merit, being a fine, large, well coloured, and mellow summer apple. Another seedling has been named

Deans' Pippin, which is likewise an excellent apple. Mr. Deans was the first to introduce into Jedburgh Williams' Bon Chrétien Pear, a graft of which was sent him in a letter from London, and it has been found to suit the locality uncommonly well. We observed a specimen of the Doyenné du Comice Pear, which is, we believe, the only one in the district; and the Marie Louise is likewise to be seen in perfection. Some kinds of Plums, including the Golden Drop and the Victoria, may also be noticed in great excellence. In fact, the Anna Nursery contains a compendious treasury of all in the shape of fruit and flower that long experience and keen observation have shown to be suitable for the district; and Mr. Deans, who has been its maker, and of whose genius it is a true embodiment, is one of the most genial and pleasant men one could desire to meet.

On the Antiquity and History of some Border Pears.

By JAMES HARDY.

BEING desirous of knowing the origin of some of the oldest varieties of Pears, I found there was a vacant space in our literature; and it was only after ransacking many old writers on botany, that any allusions to the period of their introduction occurred. The scanty results of my inquiries, so far as concerns the kinds cultivated on the Borders, I append as supplementary to the preceding paper. Although I possess numerous works on ancient botany, I have not many on gardening, so that some notices may have escaped. This attempt, however, may be useful as preliminary to more accurate investigation, and the information may be new to others, as it was to me. Several of the Scotch varieties, like those of other countries, are peculiar to the districts in which they have been raised; and obtaining only a local notoriety, their history will always remain obscure*.

1. BON-CHRETIEN. The Bon-Chrétien is by some commentators on Pliny identified with his Pomponian Pear

* "Certum autem quamlibet regionem jactare sua pyra."—*S. Paulli*.

("Pompeiana vel Pomponiana.")* Others, again, say the "Volema" is this pear; while again it is claimed for the "Musteum." The Bon-Chrétien is not commemorated by Cæsalpinus, who wrote in 1583, as being cultivated in his district of Italy. According to Ruellius, who wrote before 1537, the French were particularly fond of this pear; so much so, that while Charles VIII. of France spent his time luxuriously at Naples during his invasion of Italy in 1495, it was transported thither to gratify him, and for its good qualities it was adopted by Campania the Happy†. The pears may have been really carried from France to please the Court, but that they stocked the district is rather improbable. According to Commynes, the king was only a year and two months in Italy, from his departure to his return to France‡. Moreover, from the statement of Agostino Gallo, who wrote in 1550, the "Peri boni Christiani" were then common in Italian gardens§. It was, perhaps, the great propensity of the French for this fruit that induced Rabelais to ridicule them for it; or he may have heard of the singular compensation of Charles VIII. to the Neapolitans for his ravages, as if they could be appeased like whipped children by a present of fruit. In the voyage of his hero and his company, they land upon an island in the ocean whose natives, the Papimans, are such devoted Romanists that they were ready not only to adore the Pope but to prostrate themselves at the feet of any who had seen him. The voyagers refuse the honours intended for them, but are liberally feasted after mass by Homenas, the bishop of Papimany. "Before we arose from table, Homenas gave us a great quantity of fair large pears, saying, Here, my good friends, these are singular good pears; you will find none such anywhere else, I dare warrant. Every soil bears not everything, you know: India alone boasts black ebony; the best incense is produced in Sabæa; the sphragitid earth at Lemnos: so this island is the only place where such fine pears grow. You may, if you please, make nurseries with their kernels in your own country. I like their taste extremely, said Pantagruel. If they were sliced, and put into a pan with wine and sugar, I fancy they would be

* Dalechamp, "Hist. Gen. Plant.," i., 306. "C. Plinii Secund. a J. Dalecampio." (1587), p. 301.

† Ruellius, "de Nat. Stirpium," p. 232.

‡ "Hist. of Philip de Commynes," London, 1674, p. 327.

§ "Le Vinte Giornanti dell' Agricoltura."

very wholesome meat for the sick, as well as for the healthy. Pray what do you call them? No otherwise than you have heard, replied Homenas. We are a plain, downright sort of people, as God would have it, and call figs, figs; plums, plums; and pears, pears. Truly, said Pantagruel, if I live to go home—which I hope will be speedily, God willing—I'll set off and graff some in my garden in Touraine, by the banks of the Loire, and will call them bon-Christian, or good-Christian pears”*. Benedict Curtius, who wrote at Lyons in 1560, relates how celebrated they were in France. When old, he says, being sliced sideways and put in rose-water and sugared, they were eaten raw. The Bon-Chrétien is of late occurrence in English writers. The first date I find is 1629, in Parkinson's “Paradisus,” &c., p. 590, &c.; but there appears to be an earlier record, in a work of Leonard Mascall's, of which I have only a copy dated 1640. There are numerous varieties of the Bon-Chrétien. One of the finest of French Pears is by a singular misrepresentation made “Le Bon Chrétien Ture”; and no less an indignity is done to the name by its being corrupted in England into “Bon-Crutchling.”† The ridiculous cost at which one variety was introduced at Sion, is recorded by Parkinson. “The ten pound peare, or the hundred pound peare, the truest and best, is the best Bon Chrétien of Syon, so called, because the grafts cost the Master so much the fetching by the messengers expences, when he brought nothing else.”‡ Sion House was famous in that age for its pear trees. “The biggest,” says Coles, “that ever I saw of them growing against a wall was in the garden of the Earle of Northumberland at Sion, neere Brainford, whose branches extended themselves after a very wonderful manner.”§

2. BERGAMOT. Benedict Curtius Symphorianus, a canon at Lyons, who wrote “Hortorum Libri xxx.,” A.D. 1560, during his travels in Italy, ascertained that the “Bergomatia” rendered famous the town of Bergamo, and he commemorates their recent importation into France. Agostino Gallo, in 1550, had already described the excellence of the “Peri Bergomoti.” The “Bergomata” are likewise mentioned by

* “Œuvres de F. Rabelais,” par L. Jacob, Paris, 1842, p. 428. “Rabelais' Works,” Vol. ii., p. 352, 353, Bohn.

† “Vegetable Substances,” &c., Lib. Ent. Knowl., p. 233.

‡ “Paradisus Terrestris,” p. 593.

§ “Adam in Eden, or Nature's Paradise,” London, 1657, p. 259.

Cæsalpinus in 1583*. According to Dalechamp (1587), the "Poire Bergamot" represents the Falernian Pear of Pliny (Lib. xv., cap. 16, vel 15), so called from the drink which it affords, so abundant is its juice. Ruellius, a French author, who was born at Soissons in 1494 and died 1537, affords us valuable information. Very much to be commended, says he, are the "Bergamota," which began to be raised in my time, excelling both in their savour and their moisture†. Here we have another direct testimony to their recent introduction into France, and R. Stephens in his "Seminarium" corroborates his statement in almost identical terms‡. Rabelais, born 1483, died 1553, recommends them. Conrad Gesner, in his "Horti Germaniæ," 1561, introduces it on the authority of George Æmilius, Doctor of Theology, and pastor of the church of Stolberg. Gesner was personally ignorant of the "Pirus Bergamotte."§ "The Burgomot Peare" occurs in Gerard, who wrote in 1597 (my edition is 1633). Parkinson, 1629, gives the Bergamot a chief place in his orchard. John Bauhin, who died in 1613, refers to its being transplanted from the French borders into Mumpelgard, and he had also slips of it imported from Lorraine||. As he knew much about Pears, and has collected whatever preceding authors wrote about them, it is evident that the Bergamot was only then pushing its way over civilized Europe. S. Paulli, who wrote in 1667, relates that both this and the Bon Chrétien were to be found in the gardens of the magnates of Germany, as well as of the King of Denmark¶. The conclusion from these statements is, that both these Pears came into vogue towards the end of the sixteenth century, shortly before the Reformation, and in some countries subsequent to that era.

Val. de Bomare has a somewhat apocryphal story about the Bergamot Pear and the Bergamot Citron. He says that the essence of Cédra or Bergamote, so odoriferous, and so esteemed in perfumes, is drawn from a species of Italian Citron, named Bergamote, of which they say the origin came from a certain Italian of Bergamo being advised to graft a branch of Citron upon the trunk of a Bergamot

* "De Plantis," p. 144.

† Ruellius, ubi sup.

‡ Paris, 1540, p. 69.

§ Appended to "Valerii Cordi Annotationes," p. 273.

|| "Hist. Plant.," i., p. 45.

¶ "Quadripartitum Botanicum," p. 126.

Pear, and the citrons produced in consequence were partly Citron and partly Pear. The inventor made a secret of this discovery for a long time, and was enriched by it*.

3. ST. CATHERINE. St. Catherine Pears are mentioned by Gerard. Johnson, in his edition, 1633, says his author had misapplied the name, and he rectified it, and so "pluckt a peare" with him. Parkinson, in the "Paradisus," 1629, gives several varieties of Catherines. J. Bauhin, 1613, mentions a kind called the "Pira S. Catharinæ," as growing in the Brisgau, in the splendid stronghold of the illustrious Knights of Rhodes. Mouffett, 1655, tells us that "the Katherin Pear is simply best, and best relished."† Fruits were dedicated to the saints from their being in season about their anniversary feasts. There were several St. Catherines.

4. MUSK PEAR. Of this, the "Muscat" and "Muscadelle" of the French, there are divers varieties. Some say they are the "Superba" of Pliny, while others assign them to the "Myrapia." They grew in the Italian, French, and German gardens during the middle ages, and are referred to by all early writers: Ruellius, Curtius, Agostino Gallus, Dalechamp, Matthioli, Cæsalpinus, H. Junius (who makes them Pliny's "Hordearia"), V. Cordus (great attention being bestowed on them in Misnia), &c. Ruellius says that the popular French name for them was "Chia," or Pears of Chio, which indicates an early traffic in fruit with the Archipelago, and this is confirmed by another Pear being designated the "Greek Pear" by the common people. J. Bod. à Stapel states that they were so scarce in his country at the time when he wrote, in 1635, that he did not believe that there were more than three trees in Holland or the circumjacent regions. He gives a further proof of its rarity by advertising that he had been promised a bush, and it is to be hoped that he was not disappointed‡. This sort had reached England in 1629, for Parkinson§ says in its praise: "The Muske Peare is like unto a Catherine Peare for bignesse, colour, and forme; but far more excellent in taste, as the very name importeth." It is a joke more refined than the Barmecide's to taste Pears by the name.

5. GREEN CHISEL. This is the "Poire d' Hativeau" of

* "Dict. Hist. Nat.," ii., p. 20.

† "Health's Improvement," p. 210.

‡ "Theophrasti Hist. Plant.," p. 394, 395.

§ "Paradisus," p. 592.

the French (P. Miller), or, as it is corrupted, "Hasting's Pear." The first mention of it by name is in the "Seminarium" of Robert Stephens, A.D. 1540. The "Greene Chesill" is recorded by Parkinson in 1629. P. Neill says the Green Chisel is the Summer Bergamot.

6. POUND PEAR. "Libraria." "Poire de livre." From J. Bauhin's account, this is of Burgundian origin. He himself had obtained grafts from Burgundy, and had sent them from the same district to the illustrious Prince, William Landgrave of Hesse, a personage of historical note, much interested in natural history. In Lorraine they were termed "Poires de 16 onces."* "Libraria" is a Plinian name. It would thus appear that some Jedburgh Pears had a right to be called "Burgundy Pears"; the name perhaps descending traditionally. P. Miller says that in England this is called "Parkinson's Warden, or the Black Pear of Worcester."

7. LONGUEVILLE. No Pear with this title is recorded in any of the old or recent French lists. It may have been derived from Normandy.

8. LUDDS. This is obviously a corrupted word. Were they "Pears of Our Lady"? ("Poires de Nôtre Dame," "Pyra Mariana"), next in size to the Bon-Chrétien, and praised by Ruellius? This variety is still extant, so that a comparison might still be possible. Evelyn in, 1669, mentions the "Lady Pear," and Mouffett says of it, "too waterish, though beautiful in colour." Or were they "Lords"? "Herren-birn," and "Pfaffene-birn," Lords, or Priest's Pears? There is a further coincidence among the Burgundian Pears, viz.: "Pira Domini" or "Poires Monsieur." In modern times, "Poir de Seigneur" and "Monsieur" are synonyms of the "White Doyenné." Evelyn was acquainted with the "Lordling."†

9. ACHAN, or AUCHAN. The Achans are said to be of Scottish origin. Dr. P. Neill, at Brussels, recognised his old acquaintance, the Grey Achan, honoured with the title of "the Grand Bretagne."‡ The Black Achan is nicknamed "Black Bess of Castle Menzies."

10. GREY GOOD WIFE. This, according to Dr. Neill, is a "favourite standard in Scottish orchards and country gardens." It has no history.

* "Hist. Plant.," i., p. 53.

† "Kalendarium Hortense," p. 22.

‡ "Horticultural Tour," p. 299.

11. LAMMAS. There are two kinds: one the Lemon Lady, or Lady Lamont,* or Lady's Lemon. The other is the Crawford Pear. (Neill.) No history.

12. LATE or GREY CARNOCK, or DRUMMOND. Of Scottish origin. (Neill).

13. GREEN YAIR, or GREEN PEAR OF YAIR. Of Scottish origin and a Border name, but nothing appears to be known of its history.

14. HONEY PEAR. The name is from a German source. Valerius Cordus in the "*Historiæ de Plantis*," p. 178, &c., published in 1561, mentions three kinds; one abounded in Hessa, and the other two were cultivated at Wirtemberg. Parkinson has a Honey Pear.

15. WARDEN PEAR. Turner, the earliest English botanist of any note, and a Northumbrian, records this once popular variety in 1562. The name was applied to it from its capability of long preservation. The Warden claims, among others, to be the "*Volema*" of Cato, Virgil, and Pliny. The most likely etymon of the word is that it was a pear large enough to fill the hollow of the hand (*vola*). But Servius says that it is a Gallic word, denoting both good and large; while Goropius claims for it a German composition, signifying a full dwelling (*Volheim*). But that it should be the Warden rather than any other sizeable pear, is merely hypothetical. As the "*Monks' Pear*," it traditionally preserves the memory of its early cultivators. An identical name was used in Lusatia in J. Bauhin's time, viz., "*Monchs-birn, i.e., Monachorum Pira.*" Mouffett, in his "*Health's Improvement*," 1655, p. 214, thus eulogises the Warden. "*Wardens, or Palme-Pears, so called because one of them will fill the palm of the hand, were first brought into credit by Livia Pompeia; they are very hurtful and almost indigestible being eaten raw or green; but towards winter they are very wholesome for a weak stomach, being stued, bakt, or roasted, and to be preferred for nourishment before all fruit; engendering (especially when they are sweet and red) most wholesome juice; strengthening concoction, repelling vapours from the head, and comforting the weak and decayed spirit: would to God every hedge were full of them, as they are of wild Pears and Crabs, that both poor and rich might have a competent nourishment when fish and flesh can hardly be gotten.*"

16. WORRY-CARLE. This is most likely the "*Choak*

Pear" of the English. Mentzel, in his "Index," gives "Worry" as a synonym, which is pretty suggestive. The pears were known on the continent as "*Pyra strangulatoria*," "*Poires de étranguillon*," and there is a passage descriptive of their beauty and their allurements to the passer by, and the surprise to which he is subjected when he attempts deglutition, which appears in most of the old botanists, and for which, so far as I can trace, Ruellius is the primary authority, and which fully reminds us of the Jedburgh gardener's misadventure at Wooler Fair. The sense of it is preserved in Parkinson's rather whimsical rendering. "The colour likewise in some is greene or darke russet, and some will be so faire, yellow, and red, that they would invite any that seeth and knoweth them not to take and taste of them, which then are so different from their expectations, being harsh and unsavoury, that they presently out with their purses and bestow this adage thereon, 'Non est semper fides habenda fronti.'" But he gives them a better character in the end. "Yet this harsh unsavoury fruit, though later ripe than most of the manured sortes, by being in part mellowed with the autumnes coldes, and the standing of their juyce being pressed forth and made into Perry, doth in time so alter his former quality of harshness and unsavourineess, that it becommeth fully as cleere and almost as pleasant as white wine."* Of this fact, doubtless, the Border monks were well aware. Worlidge, 1681, commends it for Perry, for which the best pears "are such as are not fit to be eaten, so harsh that the swine will not eat, nay hardly smell to them. The Bosbury Pear, the Horse Pear, and the Choak Pear are such that bear the name of the best pears for Perry."†

17. GOLDEN KNAP. When Dr. Walker wrote, there were at Melrose, in Mr. Riddel's orchard, adjoining to the Abbey, which had formerly been the Abbey garden, some very large old fruit trees of this variety, which were known to have been planted before the Reformation. One measured, in September, 1795, 7 feet 2 inches in circumference; and another 7 feet 6 inches. They had been grafted trees, and continued to bear plentifully. Another pear-tree of the same kind had been recently cut, which measured 8 feet 10 inches. Almost the whole of this large trunk consisted of

* "The Theatre of Plants," p. 1501.

† "Systema Agriculturæ," p. 140. See also Evelyn's "*Pomona*," p. 19.

red wood, and was perfectly sound. Dr. Walker also tells us of another large tree of the Golden Knap, at Restalrig, near Edinburgh, $2\frac{1}{2}$ feet high before it begun to branch, which was measured 16th July, 1799, and was determined to be 12 feet round about. It stood in a garden, adjacent to what was the house of Logan of Restalrig, who was attainted in the reign of James VI., and the tree was probably planted before his forfeiture. It was a good vigorous tree, and generally bore a good crop*. The Golden Knap is a small, early yellow pear, and forms the largest and most durable tree of any pear we have. Dr. Neill attributes to it a Scottish origin.

On Evidences of Ice-action in Berwickshire. By WILLIAM STEVENSON.

ALTHOUGH in the opinion of many geologists, as well as that of the writer of this paper, the Kames and similar deposits of sand and gravel, so common in Berwickshire, may be very satisfactorily accounted for by the action of the waters of the sea upon loose detrital matter during the lengthened period whilst the land was in process of emergence, indubitable evidences of ice agency are of frequent occurrence. Many boulders which have been transported only a few miles from their parent rocks, such as these traceable to Hume Castle, Kyleshill, Dirrington law, Borthwick hill, and Cockburn law, and now found scattered over all the county to eastward of these localities, may have been conveyed by the action of water alone bearing them to seaward on inclined planes; but it is obvious that those blocks which are now found a hundred miles or more from their native localities, now separated by lofty ridges and deep valleys, must have been carried by some agent capable of floating heavy masses. This agent was unquestionably ice. Boulders of the latter description are still found in many parts of Berwickshire, though by far the greater number, especially of the smaller ones, have been gathered from the fields

* Walker's "Essays on Natural History," &c., p. 83, 84.

and broken up for road metal. This is particularly the case along the post road between Reston and Ayton, where fragments of gneiss, mica slate, pure vein-quartz, porphyries, and other rocks of Grampian origin, were a few years ago to be seen in every depôt by the road-side. The current which brought the ice upon which these were conveyed, must have come from westward, where these rocks occur *in situ*. Among the more remarkable of these boulders may be mentioned a rounded block of gneiss(?) on the road at the top of Ecclaw Edge—a large block of mica slate on the slope of the hill east from Burnhouses,—several smaller masses at Windshiel, Kidshielhaugh, and Abbey St. Bathans, and a block of a very peculiar diorite, which formerly was one of the stepping-stones in the Whiteadder at Ellemford. This diorite, which is composed of greyish quartz, red felspar, and a little chlorite, occurs *in situ* in the neighbourhood of Aberfoyle, and is beautifully exposed at the waterfall described in “Waverley.” Rounded pebbles of the same have been found in the Whiteadder below Preston Bridge, where also mica slate, quartz, sandstone from the Lothians, &c., are to be met with in the river shingle. Some years ago, in the course of a ramble with the late Mr. Blackadder, of Glammis, we picked up, on the bed of the river near Blanerne, a small piece of a very peculiar porphyry, which he at once identified as that of Lintrathen, in Forfarshire. Small pieces of coal have also been found in a sand-pit near Ayton Castle, and in boulder clay at Woodheads, near Marchmont, 700 feet above sea-level. These must have come from the Lothians, and it is not at all probable that water alone was the carrying power. From the nature of the rocks in Berwickshire and the amount of detritus with which they are generally covered, traces of glaciation are rare and dubious; the only well marked case being, so far as I am aware, that at St. Abb’s Head. Ancient sea-margins are very numerous and well defined throughout the county, notably so in the valleys of the Eye and the Whiteadder. They are very conspicuous upon the southern slope of the hills above Preston.

But the most remarkable and striking exhibition of ice-action is shewn in the breaking up of rocks by grounded bergs, or heavy floes. An instance of this may be seen in the freestone quarry at Langton, about a mile from Dunse. There a section of about 35 or 40 feet is exposed, the lower

half of which is solid rock ; above which are several feet of broken masses of sandstone covered by and partially mixed with sand, gravel, and clay. A glance at this shews that the upper part of the sandstone stratum has been smashed in position, by some tremendous force from without, coming from westward, and acting under water. Heavy ice is the only conceivable natural agency which could produce such an effect. A similar case was seen in a cutting on the Berwickshire Railway at Ladyflat, where the upper part of the shaley strata was contorted in a remarkable manner, also on the west or south-west side. Putton Mill Quarry, not now worked, shews a great thickness of boulder clay. The boulders are, however, only of local origin. Some from Kyleshill and Dirrington law, five or six miles to westward, are the most conspicuous. Other quarries, such as Broomhouse, Kimmergham, &c., shew only water detritus above the sandstone.

To account for the ice-action, of which evidences are so abundant in Scotland and elsewhere, some have supposed the whole land covered with an immense sheet of glacier ice, terminating on the sea-shores in huge bergs, as is at present the case in Greenland. Although during the glacial period the temperature of these islands was undoubtedly much lower than at present, as is well shown by the occurrence of boreal shells in certain deposits of that age, it appears to me that an assumption of *such extreme* cold is unnecessary and not warranted by the phenomena which it seeks to explain.

Ornithological Notes. By Mr. T. H. GIBB.

PUGNACITY OF THE GREATER TITMOUSE AND THE REDBREAST.

—During the recent snow-storm, and whilst walking near the river Aln, my attention was arrested by a strange sound, which I soon found emanated from a Greater Titmouse and a Redbreast engaged in a fierce and deadly combat. The Tit, although the lesser bird, had all the advantage on its side ; the Redbreast being held down by it with its back on the ice, whilst with its bill the Tit struck fiercely the head of its victim. The Redbreast screamed so piteously, that,

from the first, it was evident it was no match for its antagonist, whose chattering evinced completely the cry of the conqueror. At length I drove the Tit away, who, however, hovered about the scene of action, apparently eager for a renewal of the fray, when I found the Robin in a dying state and much mauled about the head and neck. It is well known that the Greater Tit will occasionally attack birds of inferior size and courage, and that the Redbreast is also pugnaciously inclined, and will drive off birds much superior in size if they venture to intrude into the immediate locality it has chosen for its retreat.

MANKS SHEAR-WATER.—The Manks Shear-Water being emphatically an oceanic bird, I was not a little surprised to receive a specimen, captured at Swarland, quite eight miles from the sea. It was shot by Mr. John Earsdon, after having been flushed by his dogs from a field of standing corn. It seems strange that this bird was found so far from its native element, and in a situation so utterly opposed to all preconceived notions of its habits. Had the bird been exhausted or wounded, a sufficient reason for its appearance there would have been at once apparent; but it rose strong and wild on the wing, and, on dissection, I found it in a healthy and robust condition. They breed, principally, I believe, on the Orkneys, and whence, after completing their nidification, they spread themselves along the western coast, never, so far as I am aware, being found on our eastern seaboard. Assuming, therefore, the bird captured at Swarland to have come from the west—whether by some sudden impulse of its own, or carried along by circumstances over which it had no control—it must have had a strange and eventful journey across our land.

THE VORACITY OF BLACKBIRDS, &c.—Near to my residence, there stands a noble specimen of the rowan tree, which last autumn was completely covered with its red berries, and, knowing them to be eagerly sought after by many of our feathered friends, I determined to watch the result of any attack that might be made by them. On the 29th August, the berries seemed to be rapidly approaching ripeness; and on that day I observed a large number of blackbirds, thrushes, and starlings congregated in the immediate vicinity of the tree, evidently anticipating a glorious feast. On the 30th, the number of birds were hourly increased by fresh arrivals from a distance, the motley crowd

chattering and screaming the live-long day. On the 31st, the busy throng increased still more, and became restless and uneasy in their movements, whilst ever and anon they darted into the tree and became lost in the foliage; their errand doubtless being to test the quality and ripeness of the fruit. Towards evening, the starlings commenced the initiative and began the attack. On the morrow (the 1st September), the starlings recommenced their onslaught; and now a goodly number of their softer billed companions joined them in the spoliation. On the 2nd September, as with one impulse, blackbirds, thrushes, and starlings inaugurated a general foray; and towards evening the tree had lost one-half of its fruit; and on the evening of the following day, I could scarcely observe a single berry. Thus in a little over two days, the tree, though a large one of its kind and containing many bushels of fruit, was completely stripped by the combined attacks of the birds.

WINTER MIGRANTS.—Many of our winter visitants have been more than ordinarily numerous, snow buntings especially. Previous to the snowstorm, they were distributed in large flocks on our upland moors; but, strange to say, I have not seen a single mountain finch. Generally speaking, when the former are abundant so also are the latter; but this year, so far as the vicinity of Alnwick is concerned, is an exception to the rule. I have not seen so many woodcocks here for a great number of years. During the storm, our hedge-rows and open water runners were tenanted by many a hapless bird. Golden-crested wrens, redwings, and fieldfares were very plentiful; the last-named being spread far and near in large flocks. Large flights of ducks were seen early in the season along our sea-board; and our rivers and loughs have been well stocked with mallard and teal, with an occasional pochard, golden-eye, and female goosander. Many flocks of wild geese, too, have passed along from north to south. The numbers of wood pigeons have been truly prodigious; reminding me forcibly of the flocks of passenger pigeons I have seen in America. I have no doubt at all that these birds visit us in large numbers from other countries; probably Norway and Sweden, for I cannot think that those bred in this country, could turn out in such vast multitudes in the winter season. Doubtless our own country birds, when concentrated in flocks, will produce an imposing force; but this would necessarily en-

tail the complete depopulation of wide tracts of country, which is certainly not the case, for the flocks are scattered about in all directions and not far separated the one from the other. I have more than once seen large numbers during a north-east gale arrive on our coast from over the sea. I regret having again to record a scarcity of landrails and cuckoos. Formerly these birds were comparatively numerous; but I have observed during the last few years sure but gradual falling off in their numbers. Last season, it was rare to hear the call of the crake in the meadow, or the song of the cuckoo in the thicket.

T. H. GIBB.

Alnwick, January, 1875.

On the value of the Horse-Chestnut (Æsculus Hippocastanum) as a Timber-Tree in Plantations. By RALPH CARR-ELLISON, Esq.

MR. SELBY'S carefully considered account of this tree in his "British Forest-Trees" is chiefly occupied with its character when planted singly in parks and pleasure grounds, or in avenues. There occurs, however, one short passage which applies to it in another character; and as that passage was written subsequently to a question which he asked me in conversation—"Whether I had any experience of this tree used as a secondary in plantations of oak?" I feel in no small degree responsible for his unfavourable estimate of it in this point of view. I well remember, too, that he inclined to think more highly of it, until I unfortunately remarked that to find a use for a light, and, as I then thought, brittle timber would be difficult in our purely agricultural region of North Northumberland. He observed, "I fear it would take up too much room, too, from its spreading side-branches." But he was too able an arboriculturist to attribute much weight to this last consideration, since no tree is more easily regulated by side-pruning, of which it is very patient. His real misgiving as to a larger cultivation of the Horse-Chesnut in plantations for timber, was certainly

only the limited demand which it would find, when felled, unless in more populous districts than those of which he and I were thinking. Moreover, it is only along the outer margins of woodlands that this tree is over-productive of side-spray. In their interior it shoots up, like the lime or sycamore, with only a just proportion of such ramification.

Since that short passage was written by the experienced naturalist and arboriculturist—of whom our Club and all Northumbrians are, and will ever be, so justly proud—the distinction between agricultural and mining, manufacturing, or urban markets for timber, has been almost annihilated; and whatsoever could be sold advantageously upon the busy shores of the Tyne, Wear, or Tees, may now be profitably cultivated on the Upper Coquet, the Aln, or the Breamish. Furthermore, the wood of the Horse-Chestnut, at thirty or forty years' growth, is now much better known than it was at the time of my conversation with Selby; and I, too, have learnt to know better. The truth is that clean-grown planks of this wood, sawn from trees of thirty, forty, or fifty years' growth, are much esteemed by carpenters, not only for interior purposes in house-fitting and joinery, but for others in which strength and elasticity are needed; nay, it often possesses far more of firmness and "reediness" under the saw plane, than has been associated with it heretofore. Nothing is more certain than that the value of native timber, which can be easily and freely worked, for such purposes as common tables, stair-steps, door-panels, shelves, cupboards, &c., will steadily increase as the supply of deal from the resinous forests of Scandinavia and the Baltic becomes more scanty and more costly. In all my own recent plantings and replantings, after a fall of ash or elm, I have introduced the Horse-Chestnut freely, as well as the sycamore. The lime, also, is a valuable tree for the same reason, that it can be now easily transported by rail to the towns, where such material is eagerly sought for.

The Horse-Chestnut, like the lime, is an erect, well-balanced, and orderly tree. They are, neither of them, bad or aggressive neighbours to the oak. Both are of great beauty throughout the spring, summer, and autumn; and nothing is more desirable than to extend the number of hardy trees that can be commonly planted on land of ordinary quality and at elevations within the range of our cornlands; and where they can add new amenity to villages

and farmsteads, as well as to parks and mansions. The native trees, such as the ash and wych elm, will always assert their rights in our woodlands; but even they will benefit by the introduction of other species more freely amongst them. The Horse-Chesnut has thoroughly naturalised itself in our Border region. It rises freely from the nuts, which ripen in ordinary seasons up to the elevation of five hundred feet and more over the sea, on the skirts of the Cheviots: and the nuts, by a very interesting propensity and habit with which the rook is endowed by the Great Author of Nature, are plucked from the boughs just ere they fall and are carried about and disseminated in all directions, on clear autumnal mornings, as if in pure sport; for the birds do not seem to eat them, and the fields are full of sheaves of wheat and beans at the very time. The same habit prevails with these birds in February with regard to the Scotch fir cones, though they seek not to get at the minute seeds. The jay and squirrel pursue an industry of the same kind, even with seeds that they scarcely taste. Such is the wisdom of Divine Providence for the dissemination of trees and shrubs.

Though thus propagating itself freely, this Asiatic tree never has the mass of inflorescence with us which it presents in the southern counties, though quite enough to be extremely ornamental. In parks, the fallen nuts are picked up and enjoyed by sheep, as well as by deer; and both, too, relish the fallen leaves. But these latter, being in great profusion, are also sought by the flocks and herds as a dry and delicate littering whereon to lie through the long, dark hours of chilling hoar frost in October and November, when they will gather under many a stately old avenue at night-fall.

R. CARR-ELLISON.

*Extracts from the Session-Book of Hutton Parish, A.D.
1649-1677. By JAMES HARDY.*

THE oldest Session-Book of Hutton is a thin, small quarto, commencing 13th May, 1649, and closing 8th April, 1677. There is a leaf wanting, containing from March 24th to May 30th, 1650; and a blank from May 29th, 1653, to January 1st, 1654, and there are two leaves misplaced in the binding. It is in a very small compact character of writing, and can be all deciphered except places where the bottom and top of the pages are blemished by damp. This book, kept during the ministry of Mr. Patrick Home, was written by David Home, schoolmaster and session clerk, up to May 14th, 1676, at which date another takes up the pen and contributes a leaf and a half. The entries are brief, cases of church discipline being most detailed, the writer apparently being interested in those petty processes, in which evidence was led. Little incidental information can be elicited relative to the public transactions of that troubled period of national history. The interval experienced several momentous changes—Cromwell's conquest of Scotland—Charles II. crowned, dethroned, and finally restored—episcopacy introduced against the general will—rebellion of the westland Presbyterians—and an undergrowth of discontent constantly fermenting;—but all the while the parish peace continued unbroken.

I shall present the notices under separate heads, with such explanatory remarks as lie within immediate reach. Further extracts may be given on a future occasion. Some dates of local occurrences and public works are here supplied, hitherto unknown to topographers; now and then glimpses are obtained of the state of the country and the misfortunes to which it had been subjected; and we have some manifestations of rural manners two hundred years ago, that we look for in vain in the pages of the historian. Hutton was a model parish, strictly kept in order by an earnest minister and a diligent eldership, and few cases of open misconduct shew their head; although it is far from being free from that crop of private delinquencies, that form the staple of such documents as this. In the early part of the book there had been a session-meeting every first day of the week, to take cognizance of offences among the parishioners, and to reckon the day's collection. In the latter years the entries of the church collections prepon-

derate. The collections were taken and accounts kept in Scots money. The contributions for objects of public charity were mostly made by the direction of the presbytery, and not from private suggestion, and so little were the people consulted that sometimes they were unacquainted with the names of those whom they were expected to aid. A good deal of the interest of the book turns upon the outlay of the week's collections. These were the special perquisite of the parochial poor, but in the evil circumstances of the period, from which Hutton was happily almost exempt, the domestic calls were the least pressing. The wounded and wayworn soldier, the captive in foreign lands, the half-starved prisoner at home, the broken-down gentleman, the gentlewoman who has lost her all, the distressed minister, the worn-out schoolmaster, the poor scholar, the ship-broken captain, the burnt-out farmer or householder, the robbed merchant, the blind, the cripple, the sick; all those melancholy outcasts of fortune passing week after week before us in these simple annotations, show how disastrously the civil dissensions had affected every class, and it is consolatory to reflect that appeals were not made ineffectually on their behalf. Most creditable also were the parochial contributions for objects of national utility, and the pecuniary assistance rendered to places suffering from burning, which was a frequent incident while houses were thatched and the fronts and chimneys were framed of wooden materials. There was a considerable circulating poverty, and Hutton appears to have been "known to all the vagrant train." If we had the means of examining other parish books, they would probably reveal elsewhere an equally praiseworthy liberality in alleviating distress, of which the instance before us is a favourable example.

I. PASSING EVENTS.

1649, June 17. "The qlk day also given to Jeane Grieve in the parochie of Ladielkirk who had her Kill brunt and yrfor recommended to severall sessions be the minister of the said parish—1 punde."

„ Aug. 5. "This said day also delivered be Mr. Patrick Home to the session ane dischairge of five punde ten shilling that he had disbursed at the direction of the presbiterie to James Murray his executores and the Heland boyes."

1650, Feb. 24. "There was no session becaus the minister did preach at Hiltoun that day, it being a day of humiliation before Mr. Daniel Douglas his admission to that Kirk according to the presbiteries direction."

Mr. Daniel Douglas was a famous man in the Merse in the days of our fathers. It is said that he was descended from the Douglasses of Edrington, and was related to a respectable family of that name in Hutton. There used to be many anecdotes afloat regarding his eccentricities. His open rebukes gave rise to the saying "You are like Daniel Douglas, more plain than pleasant." In the years of his old age, he sometimes fell off his discourse, and on one of those occasions he commenced to speak of his private affairs, and looking over to Mr. Johnston, the laird of Hilton, addressed him thus—"You'll be thinking, no doubt, that you'll get my bit land at my death, but if I keep my wits to my hinder end, there shall nobody get it but that decent honest man, Adam Douglas of Hutton." On going to visit some relations at Hutton, he sometimes bogged his horse in a marsh near the village, and his wife, who usually accompanied him on these occasions, used to slip off the pillion behind him and go quietly to the place of destination, leaving honest Daniel to make the best of his way to their friend's house; and on his arrival he was wont to address his wife thus—"When did you come, mistress?"* That sarcastic book, "Scotch Presbyterian Eloquence Display'd," gives a characteristic specimen of one of his episodes. "One Mr. Douglas, an old Presbyterian preacher in the Mers, a simple man as to the world, yet of more learning, ingenuity, and good nature than most of them; he was not long ago preaching before the meeting of his brethren, and analysing a text logically and and very remote from vulgar capacities, yet so powerful and melting was his tone and actions, that in the congregation he spies a woman weeping, and pointing towards her he cries out, "Wife, what makes you weep? I am sure thou understandest not what I am saying; my discourse is directed to the brethren, and not to the like of you: nay, I question whether the brethren themselves understand this that I am speaking."†

1650, March 17. "This day a Declaration ffrom the Commission of the Kirk in ansvere to a Declaratioun of James Grhame was read."

„ May 30. "This day was a thanksgiving for the seasonable victorie and defeate of the excommunicat traytour James Grhame and his adherents."

* Dr. Henderson's MS.

† Reprint, p. 13. See more about Daniel Douglas in Dr. Stuart's paper on Huttonhall, "Hist. of the Club," iv., p. 189.

At Edinburgh the Marquis of Montrose's Declaration was by the hangman cast into a fire lighted on a scaffold on the east side of the cross*. He was defeated on the 27th April. The thanksgiving day was kept in Lothian on the 15th May†.

1650, June 23. "Given to James farqrstone ane distrest man comed from Ireland—12 sh."

Cromwell's invasion of Scotland in 1560 was the occasion of wide-spread terror. On July 22nd, he marched from Berwick to Mordington House, where he encamped on the 23rd and 24th. "The Scots beacons were all set on fire; the men fled and drove away their cattle." "The Scots," says Whitlocke, "are all gone with their goods towards Edinburgh, by command of the Estates of Scotland, upon penalty if they did not remove; so that mostly all the men are gone."‡ There is evidence that the people of Hutton partook in the alarm. There is no entry in the Session-Book of preaching from July 14th to September 1st. When the minister left home the clerk tells where he sojourned, but strict silence is observed on this occasion. The battle of Dunbar was fought September 2nd, the day after the next entry. From October 8th to November 17th, there appears to have been another interruption of the services.

1650, Dec. 8. "This day the collection for the prisoners was intimat." Dec. 22. "Received this day from James Hog of the collection for the prisoneris—47 sh. 8 d.

This was for the poor wretches captured at the battle of Dunbar. There were 5,000 of them sent into England.

1651, Jan. 12. "This day ane act of the Commission of the Kirk against those that joynes with the Sectarian Armie of the daite the 14 of December 1650 was read."

The Committee of Estates speak of "Oliver Cromwell and his army of sectaries and blasphemers" (Aug. 29th, 1650)§. "The clergy represent us to the people as if we were monsters of the world," says Bret ||.

1651, May 8. "Given to a poor prisoner Jon Stewart—6 sh."

„ June 1. "This day Rot. Nisbet being summoned and called compeired, confessed that the first day he could not come to the kirk for Trouppers, the next day he was sick and

* "Nicoll's Diary." † Ibid.

‡ Carlyle's "Cromwell's Letters," &c., 12mo ed., iii., p. 10, 11.

§ Balfour's "Annales," iv., p. 96, &c.

|| Carlyle's "Cromwell," iii., p. 10.

wanted his cloak." Robert Nisbet was a noted drunkard, and lived in Paxton. The day when he had the "trouppers" was May 18.

1651, June 8. "This day a solemne fast and humiliation direct from the Commission of the Gnal Assemblie at Perth 7 Januar, was keiped." See Peterkin's "Records of the Kirk of Scotland," p. 636, 637.

„ June 15. "A solemn ffast and humiliation was intimat to be kepted the Thursday nixt and the Lordis day yrafter."

June 22. "This day a solemne fast and humiliation was kept, not being kept on the Thursday befor, in respect we was interrupted be the Englishe men our enemie." The Thursday's fast was kept on the 24th June.

„ Oct. 12. "Given to a poor prisoner—4 sh." Some straggler from England begging his way back.

„ Nov. 2. "The minister did acquaint the session with the collection yt was collected to the prisonners: that the presbiterie had ordained it to be carried up to Newcastle to them." Mr William Crawford took charge of it at the presbiterie.

1652, March 7. "Collected 45 sh. and given to Ben. Bell ane tried man at the West Port of Edr. [Edinburgh] being recommended. To another 12 sh."

„ March 21. "Given to twa prisonners—12 sh."

„ April 9. "Given to ane distrest woman comed from Ireland and recommended to our charitie by Mr. Daniel Douglas, our dayis collection, being 27 sh."

„ April 18. "Collected 4 lib. 2 sh. and given to ane distrest gentlewoman, ane captanes wife, being recommended be the presbiterie." "To a prisoner—6 sh."

„ May 2. "Also to ane poore prisoner—6 sh."

„ May 9. "A day of solemn humiliation." The reason for observing such days hereafter does not appear. They seem to have been held by direction of the presbytery with reference to public causes. There were no parish fast days at this period. I have noted all those subsequently recorded. They are: July 4, 1652; Sept. 12 and 19, 1652; March 27, 1653; May 7, 1654; July 16, 1654; Nov. 28, 1654; June 6 and 10, 1655; April 23 and 27, 1656; July 26, 1657; Aug. 4, 1659; April 7, 1661; June 7, 1655; Sept. 13, 1665; July 11, 1666; July 28, 1675.

„ May 23. "To a lame souldiour—6 sh."

„ July 11. "Given to a distrest woman a ministers wife—20 sh. To a distrest merchant—12 sh."

„ Aug. 1. "To a lame souldiour—6 sh."

„ Sept. 19. "Ordaines Wm. Ker, Jon Hutcheson younger, to goe through the old paroche the morrow, and to gather the collection for the towne of Glasgow. Ordaines James Hog and Geo. Nesbit for Paxtoun and Fishweek."

- 1653, Jan. 16. "The minister reported he delivered at the synod the contribution for Glasgow being 53 pundis." This has reference to a disastrous fire which broke out on the 17th June, 1652. The loss was computed at £100,000.
- „ Jan. 9. "Given to 6 prisoners—6 sh."
- „ Feb. 20. "To twa sogers—3 sh."
- „ Feb. 27. "To a poore schoolmr on Jon Douglas, being recommended be the presbiterie."
- „ March 27. "Given to three prisoners—14 sh."
- „ May 1. "To ane ministers wife who had her husband killed into Ireland—12 sh."
- 1654, April 2. "To a lame soger—4 sh."
- „ April 30. "Given to ane creeple to buy him ane barrow—12 sh."
- „ May 21. "Appoints to be given to a fundline in Ladiekirk at the dirrection of the presbiterie—30 sh."
- „ Aug. 6. "Given to one Elisabeth Stewart ane ensigne Lowries wife who lost his leg at Wooster—10 sh. To a soger comed from Barbatus—4 sh." The battle of Worcester was fought September 3rd, 1651. The prisoners were sent to the plantations*. "A terrible Protector this," says Carlyle. "He dislikes shedding blood; but is very apt 'to barbadoes' an unruly man—has sent and sends us by hundreds to Barbadoes, so that we have made an active verb of it: 'barbadoes' you." 'This may have been either an escaped prisoner or a soldier who had served his time. Barbadoes was planted 1627†.
- „ Aug. 13. "To ane sick soger—3 sh."
- „ Sept. 10. "Given to a poore woman called Rankeine who had a brunt child—4 sh."
- „ Oct. 8. "Johne Wilsons admonished for resetting a stranger woman into his house."
- „ Nov. 26. "Given to Mr Johne Yonge recommendit be the ministers at Edr.—30 sh."
- 1655, April 29. "To a poore soger—2 sh."
- „ May 6. "Given to a Major on Alexr. Gordoun—24 sh. To another on Griersone having a recommendation from the presb. at Dumfries—16 sh."
- „ Sept. 23. "Given to a woman with 3 children, who had her husband killed at Dundie—6 sh."
- „ Oct. 21. "Given to John Stewart herried—12 sh."
- „ Dec. 23. "Appoints to be given to Mr Matthew Mortimer being recommended be the presbiterie—36 sh."
- 1656, March 23. "Given to John Brae ane Irishe man herried be the Turkes—25 sh." These Turks were the Barbary cor-

* Fullarton's "Gazeteer of Scotland."

† Carlyle's "Cromwell," iv., p. 114.

‡ Helylyn's "Cosmography," p. 118.

sairs, especially those of Tunis. Admiral Blake sought reparation for their repeated piracies, and not obtaining it, entered the harbour in March, 1655, and fired nine of the Turkish ships under the guns of the fortifications, and brought the Dey to reason*.

1656, April 20. "Given to a distressed man comed from the north—6 sh."

„ April 27. "Given to a man wanting the leg—4 sh."

„ May 4. "The session thought fit that the weeklie exercise should be left until the Beirseed tyme be done."

„ June 15. "To one Bettie who had a creeple woman to his wife—5 sh. 4 d."

„ June 23. "Appoints the collection for Edinburgh to be sent to the presbiterie being 8 lib." What occasioned this collection for Edinburgh does not appear.

„ Aug. 3. "The minister exhorted the elders that if they did sie any miscarriages to *snib* them."

„ Oct. 12. "Given to Jon Thomsone ane Inglishemane in the countie of Cumberland who had his housses brunt—12 sh."

„ Oct. 19. "Collected for the Inglish man in Northampton shire who had great losse by burning—3 lib. 8 sh."

„ Nov. 2. "Collected for the Græcian, being intimat the preceding Sab.—3 lib. 2 sh." Perhaps for a student in Greek at the University? "Given to a minister's sone comed from Inglande to carry him home—12 sh."

„ Nov. 16. "Appoints to be given to Thomas Hastie for qrtering a distrest man a night—4 sh." Thomas Hastie was the keeper of an ale-house in Hutton. On the 20th November, 1650, the Scottish Estates enacted that in none of the burghs any should take "more than 4 sh. Scotts for a gentlemans bed a night, and 2 sh. for a servants."†

„ Dec. 31. "Appoints to be given to a yonge man named Cammell comed from Inglande—12 sh.; who had his brithers taken with the [Turks?]."

1657, Jan. 25. "Collected 11 sh. 4 d. and given to Jon Stewart-sone, who had great burning in Cumberlând."

„ March 29. "Appoints to be sent to George Hawshall in Dunse, blind—16 sh."

„ April 5. "Compeired Jon Peirsone for a scandall of fighting with Johne Wilson in Ladielkirk faire. Confessed Jon Wilson did shoot him; and he did take him on the haffit. Compeired Jon Wilson. Confessed he did shoot him but gave him no stroake. The session did cause them agrie, and appointed them to repaire to Ladie kirk session the nixt Sabbath."

* Carlyle's "*Cromwell*," iv., p. 120.

† Balfour's "*Annales*," iv., p. 167.

- 1657, May 3. "Given to a distrest merchant—6 sh."
,, June 28. "Given to James Nisbet in the parochie of Chirnside recommended be the presb. for keeping of a fundlan—30 sh."
,, Sept. 13. "Given to a creeple borne on a barrow—6 sh."
,, Dec. 6. "Collected 13 sh. 4 d. and given to one Hew Kennedie a lame soger."
,, Dec. 20. "Given to a distrest gentlewoman—12 sh."
- 1658, April 11. "Given to one Patrick Spreule ane old man and caried from towne to towne—7 sh."
,, Sept. 5. "Given to a distressed familie comed from Inglande having a testimoniall—18 sh."
,, Sept. 26. "To a poore scholler—3 sh."
,, Oct. 31. "Given to a poore soger—3 sh."
- 1659, April 17. "Given to James Nisbet in Chirnsyd for keeping of a fundline—24 sh."
,, May 8. "This day produced be the minister a discharge of five pounds 1 sh., collected for the building of Leet-bridge, granted be Jon Lundie collector yrof. Given to Jenet Nicol-sone a blind ministers wife—12 sh."
,, May 15. "To the hirds wife in Paxton—12 sh."
,, May 29. "Given to one Mr Andrew Aiton—12 sh."
,, July 13. "To ane distrest gentleman Rot. Dumbar—24 sh."
,, Aug. 14. "Given to a distrest gentlewoman—24 sh."
,, Aug. 21. "Given for carieing away ane creeple—2 sh."
,, Aug. 28. "Given to Rot. Ffairlie a distrest gent.—24 sh."
,, Oct. 23. "To ane Irishewoman—8 sh. Given to two poore men and ane scholler boy—4 sh."
,, Nov. 20. "To Agnes Palmer ane Inglishwoman wt 4 bairnes—12 sh."
- 1660, Feb. 5. "Given for a nights lodging to a poor soger—4s."
,, May 6. "Given to Henry Stevensone distrest by burning 12 sh."
,, May 31. "A day of thanksgiving." This was held on account of the Restoration of Charles II. It continued annually on the 29th May.
,, Aug. 12. "To George Davidstone, schoolmr—6 sh."
,, Sept. 9. "To Mr George Home—24 sh." The names with Mr. attached were chiefly ministers.
- 1661, April 21. "The minister reported he dispursed at the synod to twa men—3 lib."
,, April 28. "Given to a yonge man a scholler—12 sh."
,, June 9. "Given to ane Irisheman who had his uncle and his mother taken with the Turkes—6 sh."
,, July 21. "Given to two pocre sogers comed out of Barbatus each one a grot—8 sh."

- 1661, Oct. 20. "Collected 3 lib., bet 30 d. [*i.e.*, be out, except] for the prisoner taken with the Turkes. Appoints it to be given to Mr William Galbreath." Mr. Galbreath was minister of Chirnside.
- „ Nov. 16. "Collected 8 sh. bet 2 d. given to a woman who had her husband killed with the Turkes."
- „ Nov. 23. "Collected 4 sh. 6 d. 2 dytts to a bothell." Doits a small copper coin, equal to one penny Scots, half a bodle, or the twelfth part of an English penny. The bodle bore the name of a mintmaster named Bothwell. Here we have it only partially corrupted. See *Jamieson*.
- 1663, Feb. 22. "Given to ane Walter Drummond who had great losse be burning at Hexim [Hexham]—12 sh."
- „ March 1. "Collected for Daniel Ffargisone—3 lib 9 sh. 6d."
- „ April 26. "Collected 3 lib. 6 sh. for Wm. Wilsone in Old Haddingtoun who had great losse by burning." Old Haddington may have been the portion of the town unconsumed by the great conflagration of 1598.
- 1664, April 10. "Collected for a gentlewoman 4 lib. 16 sh."
- „ July 31. "To a beedman [a privileged beggar, or blue-gown]—4 sh."
- „ Dec. 11. "Collected for the Bridge of Dee—28 sh."
- 1665, April 30. "Given to Madame Geils Moncrief—12 sh."
- „ Sept. 17. "Collected for the Bridge of Ednem—43 sh."
- „ Nov. 26. "To a poor schoolmr—3 sh."
- 1666, Apr. 15. "Collected of collection for a converted Jew—3 lib. 15 sh. 4 d."
- „ Apr. 22. "Collected for the Herbir of Relbore—46 sh. 2 d." There is no such place as Relbore. The clerk had heard amiss.
- „ May 30. "Given to Geo. Adamsone a poor schoolmr—6 sh."
- „ June 17. "Given to James Corsen recommended be the Bishop—18 sh." This is one of the few entries that show the supremacy of Episcopacy. There was no interference with presbyterian order. "Given to one Mrs Sophia Hay—6 sh."
- „ July 22. "To a lame soger—12 d."
- „ Sept. 2. A day of thanksiving during the preceding week. "To an Irishe man—4 sh."
- „ Nov. 4. "Appoints to be given to a distrest gentlewoman—18 sh."
1667. "Given to one Lewes some tyme a preacher in England—6 sh."
- 1668, April 19. "To one Samuel Barclay a poor soger comed from Barbatus—2 sh."
- „ May 29. "Collected for the Harbour of North Barwick—

- 38 sh." The date of this erection appears to have been hitherto not ascertained.
- 1668, June 21. "Enacts that whosoever complains upon another shall appear befor the session and consign 12 sh. in caise they shall not make it out."
- „ July 20. "Collected for the Towne of Kilmarnock—8 lib. 2 sh. 10 d. and given to Mr William Galbreath, collector to the presb.," &c. No reason assigned for this collection. In 1661 it received a damage of nearly £3000 sterling from Dalziel and his soldiery.
- „ Sept. 13. "Collected for Linton bridge—3 lib. 8 sh."
- 1669, April 18. "Collected for the poore in this parochie—6 lib. bet 4 d."
- „ Sept. 26. "Given to one Captain Innis—12 sh."
- „ Oct. 10. "Collected for the 3 gentlemen of note recommended be the synod—5 lib. 16 sh."
- 1670, May 15. "Given to the minister to take to a presbiterie for a poor schellar—24 sh."
- „ July 31. "Collected for the distressed people in Couper by burning—3 lib. 12 sh. 4 d."
- 1671, Jan. 15. "Collected at the appointment of the presbiterie to two personnes whose names wer not knowen—3 lib. 4 sh. 6 d."
- „ Feb. 12. "Compeired Jeane Donaldsone and being required for a testimoniall, Ans.: She had one but she hath lost it. Appoints her to bring a testimoniall from Preston panns as also another from Kirk or uyrwise to have no residence in this parochie."
- 1672, March 31. "Given to one Captain Murray distrest—13 sh. 4 d."
- 1673, Nov. 23. "To a poore gentleman—18 sh."
- 1674, April 5. "Collected for Johne Wilsone in the church and through the parochie—17 lib. 8 sh. 8 d."
- „ May 11. "Given to a ship broken man—2 sh."
- „ Dec. 27. "Collected for the relief of the twa prisoners taken by the Turkes—3 lib. 16 sh."
- 1675, July 11. "To a robed merchant Wm. Rutherfoord—6 sh." Probably a packman.
- „ July 28. "Given to Scot who had his puddings carried before him—6 sh."
- 1676, March 12. "The minister produced ane discharge from Mr James Lawtie of 8 lib. 18 sh. 8 d. yt was received for the burning of Swynwood of the date at Chirnsid the 2nd March, 1676." The collection was made January 16. Swinewood is on the Billie estate and in the parish of Coldingham. Mr. Lawtie was minister of Chirnsid.
- „ May 7. "Collected 12 sh. 2d. with 17 sh. 9 d. in afternoon

from Hilton and his ladie." With a flourish of the pen, David Home here bids us adieu. We wish he had been less sparing of paper.

1676, June 4. "Collected for the of Eymouth—4 lib. 8 sh. Given be the Laird of Hiltoun 42 sh." This is a provoking blank. It was perhaps for the harbour; or it might be loss among the fishermen. It will probably be recorded in the Presbytery Records, if they are still extant.

II. CHURCH ECONOMICS.

1650, Jan. 26. "This day was a motion made concerning the buying of a Bell. Appoints the Minister and Mr Pat. Home to speik the laird of Blakiter and Huttonhall the most considerable heretores in the paroche and to report yr diligence to the session." Mr. Pat. Home, of Hutton Bell, was one of the elders. The movement was premature.

„ Feb. 10. "This day the session ordaines that there be no graves oppened into Ffishweek except by the bedell and appoints it to be intimat the nixt Lordis day."

1651, Aug. 10. "This day David Home Schoolmr. reports that he spak Wm. Sumervail annent the littill thing he gettis of the lands of Huttonhall yearlie, and that the said Wm. refused to pay him becaus of the Laird his absence untill he get ane act of the session for his warrandice. The session grantis ane act in the said Davids favoris and appoints it to be extracted and send to the said Wm. Sumervail with the kirk officer." In Middleton's Parliament, 1662, for complying with Cromwell's Government, William Somerwell in Hilton was fined £360 Scots*.

1652, June 22. "The whole heritors being conveened with the session, anent ane subdivision in the Kirk: Ordaines yt all the Seatis yt ar to be set up to be made after the forme of pewes, with yair endis to the wall."

1654, Jan. 1. "ffor a lock to the boxe—12 sh."

1655, July 8. "Appoints 4 sh. to be taken out of the boxe for mending the Jogges" [the pillory].

„ July 29. "Johnne Hutchesone elder reported that the Laird of Blaketer was shewing him that the seat that his son hes set up under his tolerance, was but to stand during his pleasure, grupon the sd. Jon desired it to be enacted, that in case he desired it to be removed, it should be, so that John Hutchesone younger be not prejudged of his stans as ane heretor in Huttons proportion." Both the Hutchesons were members of the session, and active business men.

* Wodrow's "History," i., p. 272.

1655, July 29. "Appoints ane voluntar collection to be intimat the nixt Lords day for putting up ane loft in the west end of the Kirk."

„ Aug. 19. "Appoints Wm. Ker and Jon Hutchesone to collect in the old parochie; also James Hog and Geo. Nisbet in the new." Fishwick and Paxton, for ecclesiastical purposes, had been combined with Hutton.

„ Nov. 18. "Appoints the voluntarie collection to be brought in againe Tewdsday nixt for the upputting of the loft."

CHURCH REPAIRS AND ALTERATIONS.—Dec. 4, 1655. "Given to George Smith—36 sh." "Taken out of the box to pay the woman in Barwick for the timber to the laft—18 sh. starling, 7 d." "Given to George Smith for thatching of the Kirk, 50 sh." Jan. 13, 1656. "Given to James Scouller in pairt of payment 4 lib. for working the timber of the laft." Feb. 3, 1656. "Given out of the boxe to Mrs Dune in Barwick—8 sh. starling 9d. for timber to the Kirk."

1658, Nov. 15. "Receaved be Jon Hutchesone elder from James Scouller in name of the session—84 lib. 16 sh." Hutcheson may have advanced money for the church repairs. He was cautioner for several who were fined by the session.

1659, Jan. 23. "Given to Henrie Nisbet for nailes making to the Kirk, 18 sh. To Alex. Hastie for drink—11 sh." The smith had "a spark in his throat."

„ July 31. "Appointed Johne Hutchesone yonger to be Treasurer until Candlemas nixt, 28 sh. being onlie in the boxe."

„ Aug. 7. "Allowed to the minister for his seat all that pairt between Jon Homes seat and Adam Nisbetts."

„ Aug. 14. "Given for ane purse to had the collections—3 sh."

„ Aug. 21. "The minister complained to the session that George Scouller had disobeyed the sessions ordinance in sitting in his forme in that place of the Kirk that was allotted for him. The session referris him to the presbiterie."

„ Sept. 18. "Compeired Mr Johne Kynneir and protested againes all the seates in the Kirk that wer set by since the visitation."

Both dissentients were members of session.

1660, May 6. "Given to Alexr. Home, Kirk-clerk in Chirnsid 3 lib."

„ June 10. "To the precentor—3 lib. To the Beddell—20 sh."

„ June 17. Lent out to William frisken—5 lib. Given to James Scouller for the up putting of the laft which is to be laid on the lands with uyr impositions for Kirk and Belhous—4 lib. 6 sh. 8d."

1660, July 8. "To the smith in Ffishweek for making the ticketts—24s."

1661, July 28. "Appoints to be given out to buy ane great Bible for reading in the Church—10 lib."

1663, April 5. "Appoints to be given to Henrie Nisbett for strae to the school-house—36 sh."

1664. "To Jon Dougle [the beadle] 20 sh. To the precentor—40 sh."

MORE REPAIRS, STEEPLE, AND BELL.—1664, Aug. 24. "Given out to buy nailles—16 sh. The said day to buy nailles—13 sh. 4 d." Aug. 28. "Given out for lyme—30 sh. To the coupper for mending the watter tub—8 sh. To Geo. Murdoche to fetch a load of lyme—10 sh." Oct. 9. "Given out to Geo. Murdoche for carieing of sand for building of the steeple—55 sh." 1665, Jan. 1. "Given to Wm. Ffrisken mason for his tub that was broken at the Kirk work—24s. To George Scouller—15 sh." March 19. "Given to Jon Clazie for drink qn the bell came hame—16 sh." July 9. "Given to the smith for work belonging to the Kirk—24 sh. in part of payt." July 23. 20 shillings "given to Jon Dougle to buy a tow to the bell." Aug. 13. "Given to Jon Peirson, smith—24 sh." Aug. 27. "To the same, 24s." Nov. 26. "To George Scouller—18 sh." Feb. 25. "To James Scouller for mending the kirk boxes—8 sh. To Wm. Ffrisken for a dayes work at the kirk 12 sh." March 11. "Given to Jon Dougle to buy a bell tow—15 sh." John tugs too strongly at the bell. 1666, June 17. "Given to Jon Dougle to buy a lock to the kirk door with nailles yrto—17 sh." Dec. 9. "Given to the smith in Fishweek for nailles—8 sh."

1667, April 7. "The session enactis that whosoever shall bring in a throughstone into the Churche yeard after the daite hereof shall pay to the boxe—24 sh." "The session enactis that Jon Dougle should have for ringing of the bell to a buriall, of landed men—6 sh.; and of the minor sort—4 sh."

MORE REPAIRS.—1667, Sept. 8. "Appoints Wm. Ker and Jon Hutchesone to goe to Eyemouth to buy the timber to the kirk." "Given out be Jon Hutchesone to louse the timber to the Kirk—13 lib. 3 sh. with 12 lib. out of the collection of the 3 lib. starling that was appointed to be collected be David Home extending to 25 lib. 3 sh." Sept. 22. "Given out to buy nailles to the Kirk—27 sh. 4 d." Oct. 6. "Given out for nailles to the Kirk. For drink to the workmen—7 sh. 6d." [The drink was ale.] Oct. 27. "Given to George Scouller—12 sh." Nov. 3. To ditto, 12 sh. Nov. 10. "Given to Alexr. officer—12 sh. for sumonding the deficientis yat would not pay their proportion of the 3 lib. starling." "To George Smith for his working at the Kirk—24 sh." "To George Scouller—

- 21 sh." 1668, Jan. 5. "Given to George Scouller in compleit payt of his wages for thatching the kirk—12 sh." March 20. "Collected 10 sh. with 8 sh. 2 d. the preceding Sabbath, and given to George Scouller for mending the holl in the Kirk that blew out with the wind." May 10. "Given out to buy the trees—3 lib." June 14. "Given to Wm. Ker to pay the smith in Barwick for making the chain to the bell—3 lib. 12 sh." Meantime John Dougle gets a new "bell tow," price 15s., Nov. 3, 1667, and again another is provided Feb. 14, 1669, price 12s.
- 1669, Nov. 14. "To Jo. Peirson smith for a lock and a slott to the Kirk doore—12 sh."
- 1670, Aug. 21. "Given to James Scouller for going to Eyemouth two dayes for wailling the timbers to the Kirk—16 sh."
- 1671, April 29. "Given out for the Almerie making in the Kirk—37 sh." To hold the Kirk box.
- „ May 7. "Given to Jo. Peirsone for making 4 batts to the Kirk Almerie and twa bands to the Kirk doore 12 sh."
- „ June 18. "Given to James Scouller for work to the Kirk be Jon Hutchesone—4 lib. 6 sh. 8d."
- „ June 25. "Appoints Wm. Ker and Geo. Scouller to tell the money that Jon Hutcheson has in keeping and receive it from him on Tuesday nixt." June 27. "According to the sessions appointment, received be William Ker and George Scouller from Jon Hutchesone, 16 lib. 14 sh. 4 d. and put into the boxe in the Churche. Mr (minister) received from David Home some dayes collection he had in keeping and put into the boxe—viz., 2 lib. 8d.—extending in wholl to—18 lib. 15 sh."
- „ Sept. 3. "Given to Jo. Peirsone for nailes to the Kirk doore—2 sh."
- „ Sept. 17. "Collected 11 sh. with uyr 4 sh. given out to buy a bell-tow."
- „ Oct. 22. "Given out to Jo. Wilson in Ffishweeke in pairt of payt for the Tickits making—24 sh."
- „ Nov. 5. "In compleit payment for making the Tickits—24 sh." Can these "tickits" have been what are now called "tokens," composed of lead or tin, for admission to the Sacrament of the Supper?
- 1672, June 2. "Appoint ane dollar to be taken out of the box to buy ane basine for to serve the Kirk."
- „ Dec. 15. "To buy a bell-tow—10 sh." This is renewed, Nov. 22, 1674, and again, Nov. 21, 1675.
- 1674, July 26. "Given to Johne Dougle for a hardene pock [a bag made of the refuse of flax or hemp] to put the poor folkes siller in—2 sh."

III. WITCHCRAFT.

- 1649, Aug. 26. "This day also complaineth George Hoge in Fishweek upon Aleson Watter yr for slandreing his wife by the name of a Witch." Of this a witness "compeirs," and "being deiplie posed," "deponed nothing," and the case lapsed.
- 1666, March 4. "Compeired Rot. Miller for slandering Jenet Clairk in calling her Witch, but it was upon this ground that he said the devill would get his doughter. Appoints Jon Dicksons in Horndaine to be cited witness."
- „ March 11. "Compeired Rot. Miller, as also Jon Dicksons and Helen Rennald, witnesses in the sd proces, and both sworne. The said Rot. being inquired if he had anything to object against the sd witnesses, Ans. Nothing. The said Jon Dicksons deponed that Rot. Miller said, All the meale in the mylne would not stope their mouths that would call her a Witch. The said Helen Rennald deponed *ut supra* and yat the said Rot. said he would prove her a Witch."
- „ May 13. "Compeired Rot. Miller for wronging Jennet Clairk by calling her Witch. Appoints him to make a publict acknowledgment of his sinne befor the congregation." He did not "satisfie" till May 12, 1677, when he had to pay a fine of 12 shillings.
- 1670, Oct. 2. "Compeired Alexr. Mabane for slandering James Happer in calling him Witch. Denyes he called him Witch, but said his brother had never power to work in Blakiters water since he fell out with him."

IV. SOME OCCUPATIONS OF THE PEOPLE UNSEASONABLY ENGAGED IN.

- 1650, Oct. 6. "This day was delated Jon Achesone, Jon Guthray, and Jon Taillor for the prophanation of the Sabbath by bearing of corne from one place to another." Sir James Balfour instructs us that "the harvest of this yeire, and autumnne, wes werey rainey and moist."* A good day may have tempted the farmers to the "carying of sheives."
- 1651, Aug. 24. "This day Jon Hutcheson delats Beatrix Chirnsid for knocking of corne upon the Sabbath day at morne." Sept. 7. "Confessed she did not knock it, but gave it two *shaps*. Ordaines her to make publict satisfaction the nixt Lords day, first for her breache of the Sabbath, and then for her disrespective carriage to the elders." Sept. 14. "Compeired Elspeth Wardlaw for the breache of the Sabbath by knocking of corne. Confessed she did not knocke it herself, but she caused Helen Whitlaw to knock it." "Compeired Helen Whitlaw. Confessed she gave it a *brashe*. Appoints them both to satisfie."

* Balfour's "Annales of Scotland," iv., p. 163.

1652, July 18. "Ordaines the Salmond cariers if they be absent upon the Lords day to bring a testimoniall from the session if they hard the sermon."

„ Aug. 1. "James Aitken delats Isobell Greenlaw, Isobell Smith, Isobell Watsone for gathering peis upon the Lordis day."

1656, July 13. "Compeired Jean Rule for the breach of the Sabbath by clodding of lint. Confessed qn she came out in the morning she did sie a moudie hillock [mole-hill] in her lint and she sat down and took it in her [lap]. The session taking it to consideration admonished her if ever she byde out of the Kirk or doe the like, she shall satisfie in publict."

1660, Oct. 28. "Compeired Alexr. Hoggart for prophaning the Sabbath by making a recreation by riding abroad and watering of his horse."

There are more notices of this kind, but they contain nothing curious. The greatest offenders are the salmon fishers of Paxton and Fishwick, but an account of their misdemeanours is for the present reserved.

On Lepidoptera, taken mostly in 1874.

I.—*Preston.* By JOHN ANDERSON.

NUDARIA MUNDANA. This was very common in July flying about the garden; and great quantities of dead ones were found entrapped in cobwebs in the smith's shop.

ARCTIA FULIGINOSA. Obtained from caterpillar, and one caught flying, May 30th, which laid a few eggs. These hatched June 12th, and the caterpillars fed all summer and autumn, and hybernated full fed.

ORGYGIA FASCELINA. I got two caterpillars on a gooseberry bush, near Drakemire Moor, but failed in rearing the moth.

MACARIA LITURATA. Fir woods, Preston, June 20th.

HYBERNIA RUPICAPRARIA. A male, December 28th, a female June 2nd. I used to get it in the end of February.

EMMELESIA ALBULATA. Common; June 4th, and August 31st.

„ DECOLORATA. Ditto. May 26th.

„ ERICETATA. Ditto. Drakemire Moor, August 6th.

EUPITHECIA LARICIATA, VULGATA, ABBREVIATA, EXIGUATA, SOBRINATA and RECTANGULATA. These were collected in 1873, and named by Dr Buchanan White.

- ANISOPTERYX *ÆSCULARIA*. I always find this moth at the beginning of March. Newman gives April as the month to get it.
- LARENTIA *MULTISTRIGARIA*. Common on willowbushes in Bunkle Wood; March 12th. Newman says "April."
- ANTICLEA *DERIVATA*. One; June 4th, and one was got a few days afterwards, newly disclosed; its usual month is April.
- CILIX *SPINULA*. One beaten out of a hedge, Broomhouse, July 10th.
- ACRONYCTA *PSI*. One; July 16th.
- „ *RUMICIS*. One from caterpillar.
- RUSINA *TENEBROSA*. One; June 1st.
- AGROTIS *AGATHINA*. From caterpillar, Drakemire Moor.
- TÆNIOCAMPA *GOETHICA*. One; July 1st, This swarms at Sallow blossoms; beginning of April.
- DIANTHÆCIA *CUCUBALI*. Caterpillars got feeding in capsules of Scarlet Lychnis in the garden, emerged June 21st.
- GONOPTERA *LIBATRIX*. One found hibernating in a house.
- MANIA *TYPICA*. One from caterpillar feeding on a Primrose.
- EUCLIDIA *MI*. Hoardweil; May 27th.

II.—*Broomhouse*. By ADAM ANDERSON.

- ENNOMOS *EROSARIA*. This was misnamed *E. tiliaria* in last year's list.
- ACIDALIA *SCUTULATA*. Not very common.
- CHESIAS *SPARTIATA*. Rather common amongst the Broom on Whitadder banks.
- ACRONYCTA *PSI*. One.
- „ *RUMICIS*. From caterpillar.
- CHARÆAS *GRAMINIS*. Very common on Hoardweil Moor, flying at night, and on Stanishel in the day time.
- APAMEA *UNANIMIS*. Not uncommon, Broomhouse.
- AGROTIS *AGATHINA*. On Hoardweil Moor.
- „ *PORPHYREA*. Common on ditto.
- NOCTUA *BRUNNEA*. One from caterpillar in the garden.
- „ *BAJA*. One.
- „ *FESTIVA*. One flying about blossoms of Bladder Campion.
- ANCHOCELIS *RUFINA*. Rather common, but not easily netted. Twisting through amongst dwarf oaks at Hoardweil.
- DIANTHÆCIA *CARPOPHAGA*. One specimen.
- „ *CUCUBALI*. Not uncommon at blossoms of Bladder Campion on the waterside.
- HECATERA *SERENA*. One.
- PHLOGOPHORA *METICULOSA*. One.
- CUCULLIA *UMBRATICA*. Common at honeysuckle.
- HELIOTHIS *MARGINATA*. One.
- STILBIA *ANOMALA*. Two from Drakemire Moor.

III.—*Lauderdale*. By ANDREW KELLY.

ACHERONTIA ATROPOS. Although rare, every collector seems to have his specimen, reminding one of the *tete de mort* of the Egyptians. Mine was a recapture from a cat, which had just struck it down amongst some bee-hives. There was rush to the rescue, and during the confusion the poor insect was heard to cry often, sometimes very loud and wailing.

SPHINX CONVULVULI. Attracted by light, several specimens have been taken near Lauder.

EUTHEMONIA RUSSULA. Moors, frequent about Hawick; Mr. Turnbull.

ORGYGIA ANTIQUA. One, grassy field near Hawick.

„ FASCELINA. Moors and hill plantations near Hawick; Mr. Turnbull.

BOMBYX RUBI. The caterpillars are extremely abundant in all our moors, but the imago comparatively rare, the disproportion no doubt arising in consequence of our severe winters thinning the hibernating larvæ.

ODONESTIS POTATORIA. Moors; and, like the above, the caterpillar is more plentiful than the perfect insect.

SELENIA ILLUNARIA. In policies, very plentiful.

„ LUNARIA. Not so common.

CROCALLIS ELINGUARIA. Preston, Dunse, Eyemouth, Lauder.

ODONTOPERA BIDENTATA. Same stations.

ENNOMOS TILIARIA. This beautiful thorn was roused and taken in a flower-garden in Dunse by Mr. Stevenson, jun. It is discriminated at once from *erosaria* by the decidedly brilliant yellow hairs on the thorax; otherwise they are very similar.

GNOPHOS OBSCURATA. Dunse, Preston, Eyemouth.

STRENIA CLATHRATA. Although this has always been a generally distributed moth in England, yet there were doubts entertained of its being a Scottish insect, till 1873, when Mr. Turnbull discovered it in great profusion flying along the railway embankments from Hawick eastward to Hassendean station. He also made capture of a pair of *Geometra papilionaria*, and since then *Euclidia Mi* and *glyphica* have also put up their appearance there. Have they migrated thither, northwards?

SCODIONA BELGIARIA. Of this rare insect, Mr. Patterson, Dunse, was lucky enough to capture a male about Cockburn Law.

ABRAXAS ULMATA. Freely taken about Hawick, and, I believe, about Dunse also.

OPORABIA FILIGRAMMARIA. On the banks of Teviot, among Willows. A rare capture by Mr. Guthrie, Hawick.

LAURENTIA OLIVATA. Another rare capture by the same.

EMMELESIA ERICETATA. A lovely insect. Moors, Longcroft.

HERA OBELISCATA. Fir woods, Thirlstane Castle, plentiful.

YPSOPETES IMPLUVIATA. Preston, Eyemouth, Hawick, and Lauder.

- MELANIPPE GALLIATA. Not uncommon.
- COREMIA MUNITATA. Moors, among Junipers.
- „ FERRUGATA. Heather, abundant.
- CIDARIA RETICULATA. Hawick, Mr. Guthrie.
- „ TESTATA. Moors, plentiful.
- „ FULVATA. On *Rosa canina*, common.
- „ PYRALIATA. Hedge-rows and road-sides.
- PELURGA COMITATA. Common.
- DILOBA CÆRULEOCEPHALA. Woods, Blackadder.
- CYMATOPHORA DUPLARIS. The only instance of this being taken was by Mr. Stevenson, jun., in a garden at Dunse.
- MAMESTRA ANCEPS. Policy, Addinstone, rare as yet.
- „ ALBICOLON. Hawick, taken in the High Street by Mr. Guthrie. Found in only two other localities in Scotland.
- „ ABJECTA. The insect thus named in the "Proceedings" for 1873, p. 123, turned out rubbed specimens of *Hadena adusta*.
- TRIPHÆNA JANTHINA. Addinstone, at sugar, plentiful.
- „ ORBONA. Plentiful.
- NOCTUA BRUNNEA. Cleekhimin garden.
- „ FESTIVA. Junipers, Longcroft.
- „ UMBROSA. One or two from *Viburnum Opulus*.
- „ RUBI. One from *Urtica dioica*, at Addinston. This is as yet the only capture for the Tweed district.
- ANARTA MYRTILLI. Moors, plentiful, but not easily caught.
- TÆNIOCAMPA CRUDA. Willows.
- ANCHOCHELIS RUFINA. In Aiky Wood [near Hoardweill], four specimens.
- TETHEA RETUSA. Two or three specimens have turned up this year, at different stations.
- AGRIOPIS APRILINA. In the grand old wood (Aiky), at sugar. The Dun Bar is also very plentiful there.
- HADENDA ADUSTA. Addinstone, one, 1872, but now taken freely at Dunse, Eyemouth, and Hawick.
- „ PROTEUS. One specimen only of this was obtained in 1873, but the next year it has been taken in great abundance at Aiky Wood.
- „ GLAUCA. Addinstone, one disturbed from nettles, and wishing to obtain some more I sugared the locality freely, but *glauca* could not be tempted.
- PLUSIA INTERROGATIONIS. Dogden Moss, a few specimens. This is the only fresh novelty of the season, and was carried off by a very young naturalist, Mr. Hunter, jun., Dunse.

IV.—*Eyemouth*. By WILLIAM SHAW.

- POECILOCAMPA POPULI.** Last year Mr. S. Buglass got two of this moth on shop-windows at Ayton. One of the caterpillars died with us in changing.
- DICRANURA BIFIDA.** Mr. T. Renton got a caterpillar at Ayton in 1873, which went into the chrysalis all right, but unfortunately it had been stung. This year there was another caterpillar found drowned in a tub of water.
- AMPHYDASIS BETULARIA.** I have got two this season; it has also been got at Dunse, and seems to be widely distributed, but not common. Banks of Eye.
- GNOPHOS OBSCURATA.** Last year I got a bad specimen, but this season I found it plentiful on our sea banks. It comes to light or may be captured on Burdock, Wood Sage, or Ragwort at dusk. Sea-banks, Gunsgreen.
- ACIDALIA SCUTULATA.** I have only a netted one of this little moth. Garden, Gunsgreen Hill.
- CABERA EXANTHEMARIA.** Common amongst Sallows, banks of the Ale.
- HYBERNIA AURANTIARIA.** Of this rare Berwickshire moth two have been obtained, one came to the light when we were sugaring, the other was found by Mr S. Buglass, sitting on a shop window at Ayton.
- YPSIPETES IMPLUVIATA.** Common amongst the Alders here. The chrysalis is obtained under moss and bark. Banks of the Eye.
- MELANIPPE GALIATA.** Last year I got a wasted specimen, but have got none this season. Sea-banks, Eyemouth.
- SCOTOSIA DUBITATA.** I got a moth about the middle of October on Ivy, which I take to be a hibernated female. Eyemouth.
- ANAITIS PLAGIATA.** I have taken two when sugaring. *Hypericum hirsutum* is abundant at the place, on which the caterpillars are likely to feed. Sea-banks, Eyemouth.
- THYATIRA BATIS.** I have captured three of this beautiful *Noctua* this season, other two have been taken at Ayton. It comes freely to sugar. Banks of the Ale.
- ACRONYCTA TRIDENS.** Found along with the next, but it is difficult to distinguish them. Ayton and Eyemouth.
- „ **PSI.** Common. It comes freely to sugar. Eyemouth.
- „ **LIGUSTRI.** I have got two; one from the chrysalis and one at sugar, another has been got at Ayton. Banks of the Ale.
- „ **RUMICIS.** The caterpillars are common on *Cnicus arvensis* on our sea-banks. Gunsgreen.
- XYLOPHASIA HEPATICA.** We had a good many chrysalis of *H. thalassina*, and one of them turned out to belong to this rare Scottish moth. Ayton or Eyemouth.

CERIGO CYTHEREA. When sugaring on the highest part of our sea-banks, I had the good luck to capture one of this rare moth. It must fly late, as it was twelve at night, before it made its appearance. Sea-banks, Gunsgreen.

MAMESTRA ANCEPS. I find I have two, I got one at sugar this season; the other must have been got in 1873. Sea-banks, Eyemouth.

„ FURVA. I had one or two previously, but this season, they were in great abundance on Wood Sage. They also came freely to sugar. Sea-banks, Gunsgreen.

RUSINA TENEBROSA. Plentiful at sugar. A female was also bred from the chrysalis. This is enclosed in a very tough short cocoon very closely fitted to it, of a testaceous colour, which becomes very dark before the perfect insect emerges. Banks of the Ale.

AGROTIS SUFFUSA. Pretty common at sugar. Eyemouth and Ayton.

„ NIGRICANS. Comes freely to sugar. Sea-banks and Gunsgreen.

„ OBELISCA. I have only got a worn specimen, on Ragwort, Sea-banks.

„ PORPHYREA. I have sugared about half a dozen of this pretty little species on our sea-banks. It would be interesting to know if the caterpillars still cling to the few remaining bushes of *Calluna vulgaris*, or if they have adapted themselves to other food.

„ LUCERNEA. I had formerly taken several on Valerian, but this season it was abundant on the flowers of Wood Sage. It does not come to sugar. It is a very sluggish insect, and will allow one to box it off the flowers, without attempting to fly.

NOCTUA TRIANGULUM. I have sugared two. It does not seem to be common. Banks of the Ale.

„ RHOMBOIDEA. Mr S. Buglass has netted one of this rare moth. Ayton.

„ UMBROSA. Several, but it is difficult to get one perfect. Sea-banks, Gunsgreen.

ORTHOSIA YPSILON. S. Buglass was fortunate enough to sugar about half-a-dozen of this interesting moth. He got some of the caterpillars too. They are likely to feed on *Salix alba*. Banks of the Eye.

XANTHIA SILAGO. I have bred this pretty insect from caterpillars in catkins of the Sallow in spring. Banks of the Ale.

NECATERA SERENA. I got two on Valerian flowers, and one has been got at Ayton. It is easily known at night by its white colour. Eyemouth and Ayton.

EUPLEXIA LUCIPARA. Not uncommon at sugar. Banks of the Ale.

APLECTA HERBIDA. Several at sugar. Banks of the Ale.
HADENA CONTIGUA. One from chrysalis. Ayton, S. Buglass.
HELIOTHIS MARGINATA. One at sugar. It seems to fly late.
Near Eyemouth.
ABROSTOLA TRIPLASIA. One netted. It seems rather rare.
EUCLIDIA GLYPHICA. One netted. Sea-banks, Gunsgreen.

Two of last year's list were incorrectly named. *Thera fumata* turns out to be a worn specimen of *Ellopia fasciaria*; and *Caradrina blanda* is identical with *C. Morpheus*. I must here acknowledge my great obligation to Mr. R. F. Logan, of Duddingston, for many valuable hints and information, much of which, I regret to say, I have not had the opportunity of working out; and also for his great kindness in naming all our doubtful species.

On the Signification of some Names of Places in North Northumberland. By RALPH CARR-ELLISON, Esq., F.S.A. Scot.

I.—GREVES ASH.

SOME years ago when I was engaged in an examination of the site and remains of the British Town known by the the above designation, together with its curious earthworks and rude walls of protection, on its hill-side amidst the Cheviots, I felt much curiosity respecting the origin of its remarkable name. Our late Secretary, Mr. George Tate, who took the leading part in directing the searches which we were authorized to make by the late Duke Algernon of Northumberland, also expressed much interest in the question. But neither of us could then suggest anything satisfactory, even in the way of conjecture. Nevertheless time and certain researches nowise connected with Greves Ash, have led me to suspect, and more than suspect, an origin totally unthought of and unexpected; and which would have been pondered and considered by our lamented friend with all his wonted sagacity and judgment, if it had only presented itself to my mind during his lifetime. Although

descriptive of the site of an undoubtedly British town or village, there is nothing of Cymro-Celtic in the compound term—Greves Ash. There is no reason to doubt that it is Anglo-Saxon English, handed down, as we may believe, from the corresponding epoch of our history. At first thought, one is led to inquire whether some stately ash-tree might not have once distinguished the spot—the soil and situation being quite such as might favour the conjecture. But what could a Saxon *greve*—the chief-officer of the ward or sub-division of the shire adjoining the rivers Glen, Breamish, and Till—have to do there? Let us consider then. Could *greve* here be the Early-English for *grove*? Hardly so; for in neither form is the word *grove* in popular Northumbrian use; and if it were, why should a British village be denominated the *Grove's Ash-tree*? Again, could *greves* be used in the sense of *grooves*, or trenches? But such trenches are nowhere in the north called *greves*. Could it be *graves*? But this is never pronounced as *greves*. Whilst again the British graves, which are traceable amidst the heather at some little distance around Greves Ash, are very unobtrusive objects, and nowise such as to be regarded as characteristic of the locality. But the key to the difficulty lies in the word *Ash*, or *Ashe*; or *Aske*, as it also known to have been written. Let us, therefore, here examine how many other places called simply Ash, or Ashe, are to be met with in a topographical dictionary. Of these I find thirteen, and one Aske. Moreover we have Ashen, in one instance, a plural form of great interest and importance, as we shall see. But ere we give up the ash-tree, let us compare the derivatives from other native trees. We find only one place denominated Oake, and one Aike (the northern equivalent). The beech affords but one place simply so named; and the elm, three called Elm. The birch and the thorn, however, are more productive: six places being called Birch, or Birche; and six Thorn or Thorne. If the places named Ash, or Ashe, were chiefly in the Danish regions of England, we might ascribe them to the known fact of the ash-tree being held in special regard by that people. But it is not so. These sites are rather in Saxon or Anglian districts. When, however, the Danish word *by*, hamlet, is annexed, then we have a perfect co-distribution of the numerous Ashbys, with the other characteristic terminations of Dano-Saxon nomenclature in Eng-

land*. There remains, therefore, from this comparison of the number of places named simply after some species of tree, without any other element annexed thereto in composition, considerable reason to reject the ash-tree from any claim to the etymology of most of the sites in England denominated Ashe, Ash, or Ashen; though if we allow it as many as the oak and elm conjunctly, it may possibly account for about five out of fourteen. The ash-tree in Anglo-Saxon is *æsc*. It is masculine. It forms, as its genitive, *æsces*, as its dative *æsce*, and (which is important to remember), its plural *æscas*. We may here remark that the ash is always popularly called *esh*, or *esh-tree*, in Northumberland. The township of Eshott was originally Esh-holt (ash-thicket). The southern form of the same is Ascot, or Ascott, *fraxinetum*. But in Yorkshire we have again Esholt in the true northern form. Yet Greves Ash is never called Greves Esh by the country folk, if I remember aright. We now come to the interesting question: If the ash-tree does not give the element of composition in the remarkable designation—Greves Ash, Greves Ashe, or Greves Aske—to what other element are we to look? I believe we have it in the Anglo-Saxon *axe* or *acse*; plural *axan*, femin.;—our English *ash*, or *ashe*, and *ashes*, “embers, cinis, cineres.” The Scottish pronunciation is *asse*, or *aiss*, *aisse*; Cumbrian, *esse*; in Durham we have the village of Eshe; in Northumberland we speak of an *asse-heap*, or *ask-heap*; German, *asche*, or Mæso-Gothic, *asja*; Old-Norse or Icelandic, *aska*. There seems to me all likelihood that most of the places called Ash, Ashe, and Ashen in England, are on the sites of British towns or villages, which were destroyed by fire, in the progress of the Anglo-Saxon conquest and occupation of the country. When the conquerors erected a hamlet of their own upon the spot, they seem to have denominated it *Aston* (that is ember-town), and I find no fewer than forty-five English villages bearing the name of Aston. Lest it be thought that this was a softened pronunciation from Ashton, after the ash-tree, I may observe that we retain unchanged our full complement of Ashtons proper, namely, twenty; whilst from *ac*, the oak, we can adduce only sixteen Actons. The inevitable inference, to my mind, is, that Greave’s Aske or Ashe—or

* It is not improbable that some of the numerous Ashbys may have been named, not from the ash-tree, but from the Old Danish *as*, plural *æsir*, the designation of any heathen god or gods of that people.

Greve's Aske, or Ashe—was a British town destroyed by fire and reduced to ashes during the Saxon period. We have further evidence in the word Greve's, that it was burnt in Saxon times and probably by Saxon hands. Now a *greve* (*gerefa*) was the Saxon *governour*, or prefect of a province—the shire-reve, or sheriff, or ward-reve. But tributary land, under the sheriff's charge and protection, was called *gerefa-land*, or *greve-land*; and the inhabitants (British chiefly) would be designated *gerefa-folk*—greve's folk. Thus Greve's Ash may be an abbreviation of Greve's-folk's Ashe, or "Burnt hamlet of the tributaries." For we know that in moorlands or mountainous tracts, where the Britons were able to escape extermination, they oft-times became tributary to their stronger neighbours by paying contributions of cattle or the like, and received in return from the constituted authorities of the latter some degree of protection. This may well have been the case in the glens and on the skirts of the Cheviots. For, extremely instructive are the township names of Ingram and Reveley, the former that of a hamlet—even in comparatively recent times a large village of crofters, with, it is said, a market-cross. It is beautifully situate on the southern side of the Breamish, and has, to the westward, within a mile, extensive remains of British settlements, in numerous hut-circles upon the hill-side, the whole surmounted by Brugh-law, or Burgh-law, and another prominent stronghold of the British people. Now Ingram must have been, I think, in Saxon, *In-gérah-am*, "The home of the *In-yore-folk*," that is of the people of yore, of the olden people of the land. And these people were likely still lingering elsewhere on the lands hard by; for Reveley, just over the water, was the lea, or appropriation, of the *reve*, or sheriff, and of the Revesfolk, or sheriff's tributaries, on the margin of the *gerefa-land*. From Ingram and Reveley would begin British tributary territory, and it would extend westward through a great extent of hills and moors. But who burnt the British fortified town at Greves Aske? May it not have been fired by the Saxon ward-reve, or shire-reve, himself, in judicial retribution for British inroads upon Saxon settlements: for such names as *Branton* and *Brandon* are very suggestive. Had Saxon townships on these sites been destroyed by British torches from the hills? and was Greve's Aske the name given by the Anglo-Saxons to the main stronghold of their oppressed but

unsubdued neighbours when they stormed and burned it, not improbably led by their greve himself acting in punishment of his restless British tributaries? When the circular huts of Greve's Ashe were examined by Mr. Tate and myself, remains of charred wood were found in all parts of them, more or less. I do not now doubt that the whole collection of huts and sheds had been stormed, and consumed by fire.

II.—HEDGEHOPE.

"Hedgehope," more properly "Headgehope," is the second in elevation of the Cheviot Hills. The popular pronunciation, which is as if the word were written "Heedgehope," or "Hidgehope," shows that the initial element is not *hedge*, which is never so pronounced; and which is plainly inapplicable in the designation of this bold and conspicuous hill, obtusely conical in form, but attaining nearly 2,300 feet of elevation above the sea. Headgehope, moreover, occupies a commanding position on the English side of the Cheviot range, of which it is an integral member. Between it and Cheviot Hill, or Cheviot Fell, proper, is the narrow dale or "hope" of Harthope, through which flows a mountain burn which receives its designation therefrom. Thus on its steep northern and western declivities is Headgehope bounded. To the south it has Linhope, an upland dale among the heather and the bracken, with bright sunny slopes and rocky braes, clad in part with graceful birch and rowan, thorn and hazel, and aspen; with a limpid burn of mossy water, which forms two or three graceful lins, or cascades. To the east of the hill, or mountain, is Calderhope, an open pastoral "hope," or small moorland dale, with its accompanying burn and characteristic vegetation, but not so sunny, varied, and attractive as Linhope. On the southeastern flank alone is Headgehope met by high moorlands, and here it is but a narrow ridge from Dunmoor Hill, or Hartside, which extends itself so as to constitute a sort of saddle, by which the bold heights of Hartside become, as it were, a southern buttress to Headgehope; the graceful rounded cone of which is clad in purple heather and delicate cloud-berry, grassy bent, and waving bracken. And nowhere is the shadow-play of the clouds more lovely, than over the surfaces of these hills on a summer's day. Nowhere do the clouds themselves in showery weather, more delight to descend with their mysterious curtains, or reveal more

striking effects when those curtains are partially withdrawn. Then we know that these same Cheviot Hills, of remotely ancient porphyry rocks, igneous and eruptive in their origin, but ground down and rounded off, as we see them, by glaciers of the great ice-epoch, thicker and heavier perhaps than now oppress the surface of Greenland, possess a geological history that entitles them to regard the Alps and Pyrenees as overbearing upstarts. Is it not, then, worth a little inquiry to arrive at the reason why our own Anglo-Saxon and Early English forefathers came to adopt such an evidently composite and special designation for the hill before us. The name, clearly, is not British, that is to say, Cymric, like that of Cheviot. It has occasionally been written as "Headsop," or "Heidsop," or "Hedsop." And if it had been simply "Headhope," the meaning would have been sufficiently intelligible. *Hope* is an Anglian term occurring in many counties; in Shropshire, in the Peak of Derbyshire, in Yorkshire, Durham, and on the confines of Westmoreland, in Northumberland and Cumberland, Roxburghshire, &c. It signifies a short upland side-dale, traversed in general by a burn, but not always, for sometimes in moorland regions we come upon little dells denominated Dryhope. In the Scandinavian regions, a word of kindred sound and origin is applied to small and narrow openings of a coastline, affording space for a sheltered recess, or inlet. But the term has not the same extensive application inland, as our Anglian usage assigns to it among our northern English moorlands; where also there is evidence to show that it had preceded the introduction of terms belonging to the Danish and Norse nomenclature, which became afterwards so prevalent in Yorkshire, Durham, and Cumberland. The Hopes seem to have been named by the earlier Anglian settlers in those vales. In the Mid-Anglian region of Shropshire, Derbyshire, and even in Herefordshire we find villages and towns denominated simply Hope; and always, I believe, with reference to their situation in snug little dales—a circumstance especially true of Hope in the North Riding of Yorkshire. It must have been thoroughly established as a native term among the North-Anglians of the Northumbrian Earldom, where it is of continual occurrence and quite unmingled with any of the terms of either Danish nomenclature from Yorkshire, or of Norse from Cumberland or Dumfriesshire. The name of Headgehope cannot be

accounted for by the naked elements of *head* and *hope*. But it stands forth as very strong evidence, that our Anglian geographical *hope* had developed itself by assuming the augment, in the same manner as various other geographical or territorial words, such as *beorg*, hill; *gebeorg*, hills collectively, or lofty hills; *feld*, a field; *gefeld*, fields-collectively, a plain; *dal*, a part; *gedal*, a portion; *eard*, *ge-ard*, *mære*, a limit; *gemære*, a border-line. And where three or more *hopes*, or small dales, were observed to converge, we may be right sure that the term *gehope* would be in use. The same principle runs through the German tongue, as every German student well knows: and he is familiar with *gemoor*, a moorland tract, from *moor*, a moor. The preservation of such a name as *Headgehope* is strong evidence that *gehope* was in usage among our Anglian forefathers; for it appears to be plainly *head-gehopa*, or *heafod-gehopa*, "Head of Hopes," or small vales—*Linhope*, *Harthope*, and *Calderhope*. It is satisfactory that an instance of our term *Hope* in the Anglian genitive plural is actually preserved in the name of a moorland fell, and of a gentleman's seat, in the neighbouring county of Durham. About four miles to the southward of Wolsingham, rises a ridge popularly known as *Hoppiland Fell*, but properly *Hopa-land*. It is bounded on the north by another *Harthope* and *Harthope-burn*; enduring evidence, in common with a whole host of other territorial names, of the numbers and wide diffusion of the hart, or red-deer. On the southern side flows *Ayhope-burn*, until at *Hopa-land Park* they converge and meet. Here, then, we have the land of *Hopes*; and we may be sure that wherever such descriptive titles were conferred by those who have long passed away, there is a varied and a pleasant picture of dale, and hill, and dell, of heather, birch, and verdure. It remains only to counsel the adoption of *Headgehope*, as the simplest amended or orthographic spelling. It is by no means unlikely that this is merely an Anglian translation of a preceding British appellation of the mountain. Let us see how it would stand in the ever sweet and picturesque language of the Cymric Britons. Methinks, then, that *Headgehope* may have echoed to *Pen-glynoedd* for a thousand years or more, before that *Ida* established himself at *Bamborough*, or any but the Celtic races held footing on the heather.

III.—CUNION CRAG.

The grand ice-rounded crag on Dunmoor-hill bears the name of Cunion. It is obviously a British plural, like *Dynion*, men, from *Dyn*, a man: *Druidion*, Druids. Owen Pugh says that *cun* is a leader, or chieftain—plural, *cunon*, but also *cunion*. In Wales we have a well-known scene of rocks called *Cerrig-y-Druidion*, or, *Creigan Derwyddon*, rocks of the Druids—or, perhaps, Druid-like rocks. *Craig*, plural *Creigiau*, crag, crags. *Creigiau Cunion*, would be Chieftain Rocks. But to express Rocks of the Chieftains, it should be, I believe, *Creigiau-y-Gunion*, changing *C* into *G*.

IV.—HEDGELEY.

Anciently written *Hiddeslie* and *Higgeleye* in the Pipe-roll and other early muniments, which I have often consulted for it; and it is still pronounced as if written with *i* short. Yet *Hedge* is never pronounced *hidge*, and we may be quite sure that *Hedge* has only a conventional place in this topical name. In all likelihood its etymology is *hige-leag*, from Anglo-Saxon *hīgu*, a family (pronounced *heegu*) or household, domestics included. It might signify a site brought into cultivation entirely by the domestic labour. It cannot be from *heah*, high, because the site of the township was anything but elevated, being at Low-Hedgeley only seventy feet above the Breamish, where its foundations exist on the green Rabbit-Banks. Also, because *heah-leag* would produce Healey, or Heeley, or Highley—not Hedgeley. But as Hedgeley is a pleasing name it need not be changed. If there was not a hedge there, there might have been. When Sir Walter Scott was asked "Whether The Abbot ever forded at Abbotsford?" he replied, "He might have done so." But it is well to remember the probable, and not uninteresting real etymology of Hedgeley.

V.—YEVERING AND YEVERING BELL.

I had never thought with sufficiently close attention and application to find out what "Yevering" and "ad Gebryn" and "Gefrin" could really be; though, in a cursory way, I had sometimes guessed. Anglo-Saxon *brynan* is "to bren," as our old folk still properly say. They *bren* the sticks, but the sticks *burn*, Anglo-Saxon *byrnan*. I think Yevering will turn out to be a place of *gebryne*, or Heathen Saxon

cremation (*Brynan*, cremare; *Byrnan*, ardere); and this is the more likely as *bæl* is in Saxon a funeral pyre. *Bæl* was not the word for a mere beacon. *Gefrin* looks very like a variant form from *gefiran*, to fire. I learn from Canon Greenwell that the Heathen Saxons always, if possible, *burned* their dead in time of peace. He thinks they even did so with the fallen in battle; but manifestly this must generally have been impracticable, because much fuel is needed to consume even one human body completely. To do it incompletely would be too revolting to be practised. For our purpose, however, of the meaning of *Gebryn*, *Gebyrn*, *Gefyrn* or *Gevyrn*, *Yebryng*, *Yevryng*, it is enough to know that in the time of peace the Heathen Saxons *burned* their dead and then *buried* the ashes in urns, probably often in the vicinity of the same spot, or at no great distance. One can easily infer that hill-tops would be selected for such combustion, to carry off the offensive odour. I do quite believe that Yevering Bell (or Bale) was a place for burning of the dead in Heathen-Saxon times. I used to refer the name of Bell to the form of a *bell*. But Saxon bells were of a very different shape from ours, being like quadrangular boxes, rounded on *two sides* only at top—not at all resembling a conical hill.

Remark on Yevering. By JAMES HARDY.

WHILE agreeing with Mr. Carr-Ellison that Yevering is a Saxon word, the above being a reply to my suggestion as to its likelihood, I think the town of Yevering communicated its name to the hill, and not the hill to the town. Jamieson, the Scottish lexicographer, supplies an etymon, which is applicable to any hill-top or rising ground designated *Bell*. "Bell of the Brae," he says, "is the highest part of the slope of a hill." "Cambro-British *bul* denotes a prominence, or that which juts out." In the immediate vicinity stands Heathpool Bell, deriving its name from the ancient territory to which it appertains. Newton Torr, Humbleton Heugh, and Akeld Hill are cases of similar appropriation. The signification of Yevering remains unaffected, detached from its hill, on which the Saxons have no claim. We must not

again light the fire to Baal, or any other substitute, after demonstrating that this hill-top was a British fortress, having nothing sacred about it; for such it would be, if selected as a funeral pyre, not less than if it had witnessed Druidical sacrifices. With all deference to our learned co-member, I enter my protest thus far; having witnessed all that the Club's excavations revealed.

On the Occurrence of the Wild Cat in the Border Districts.
By JAMES HARDY.

IN the "History of the Club," vol. ii., pp. 357-359 (1849), I presented a notice of the Wild Cat being known as a native animal all along the Berwickshire coasts, and also in the neighbouring parts of East Lothian. There were several then, as now, who doubted that there were Wild Cats at all in the lowlands, but the fact is incontrovertible. In a correspondence which recently appeared in the "Kelso Chronicle," I adduced other instances of its being familiar to the country-people, and some other information worthy of preservation was then elicited from two other contributors. In my article for the Club I had adverted to the practice of this animal harrying the hen-roosts at Dunglass, in East Lothian; but I had not then met with Alexander Somerville's encounter with it in that vicinity, when he was a herd boy, as he has related it in his "Autobiography of a Working Man." When I was at school I remember Somerville very well. His information does not go nearly so far back, as that which I produced from the statements of some very old people, in my former notice. Ogle Burn, in the parish of Innerwick, the scene of his adventure, is a deep dark ravine, wooded with oaks, which runs up the base of and partly encircles Blackcastle Hill; and higher up, although parallel in its course to Billsdean and Dunglass Burns. "The Ogle Burn," he says, "had the reputation of being the home of a colony of Wild Cats. I had never seen them, but had heard much of them, and was often cautioned, partly in joke to frighten me and partly in earnest, by those

who knew the wooded recesses of the ravine better than myself, not to go among the Wild Cats, nor touch their kittens if I came upon them, for if the old ones saw me near their kittens they would spring upon me and tear me to pieces. They were supposed to be in a covert of furze midway up a rocky eminence; and this place, during the first year or two of my herding, I never dared to explore for fear of them. One day, at the distance of several hundred yards from there, I noticed a large nest on a tree, having all the appearance of the nest of a pair of hooded crows. The tree grew from a deep hollow near the bottom of a precipice, and had a trunk of about fifty feet without branches. At the height of fifty feet its branches began to spread. One of them extended towards a narrow point of rock, that point of rock extending six or seven feet beyond the perpendicular of the precipice. The top of the tree was about forty feet higher than that point; and the nest about half-way between it and the top. I was at the root of the tree, and having resolved on an ascent, denuded myself of my corduroy jacket, and went to work. In due time I reached the first branches, and resting there for a minute, saw that if the projecting rock was strong enough to carry me, I could pass from the tree to it, and from it to the tree; and that whether it was secure enough to carry me or not, it would carry more weight than that of a cat. I saw that, but no thought of cats was in my head at the time. I had no thought of any inhabitant of the woods but of the hooded crows, into whose nest I was going to put my hand when I got twenty feet higher. So going on from branch to branch, I easily overcame that distance. The old crows were neither flying about, nor had one of them gone out of the nest, which made me suppose there was nothing in it. I put in my hand, and at the same time reached my head over it to look in: the next moment three young cats, their eyes like lightning, their little tails bristling, and their backs set up, scratched me and sprang towards my face as far as the edge of the nest, spitting and striking out their little paws with all the ferocity of tigers. They were probably five or six weeks old, not more, and were of a greyish dun colour. I did not remain to know more of them. Never but once, when I fell from a tree, did I come down so quickly as I came down that time. I was at the bottom, my hands and clothes almost on fire with the friction of running down, in

a very few moments, and away from the place as fast as I could trot. My dread was of the mother cat; but I did not see her. It was an old crow's nest, and she had made use of it for her kittens, reaching the branches of the tree from the top of the precipice. At Branxton I told in the evening what I had seen; and as an enmity that knew no mercy was vowed against all Wild Cats, some of the men took their guns and dogs, and going to the top of the rock so as the old cat might not escape if she was in the tree, fired shots through the nest repeatedly, and killed her in it, and also her poor young ones. One of them made a cap of her skin."

In Switzerland, the Wild Cat "passes the day stretched out upon a branch, ready to pounce on whatever prey may come within reach of its spring."* With us, it not unfrequently occupied the sea-caverns, dwelt in the crevices of rocks, or seized upon the deserted den of a fox or badger. About the head of the Monynut Burn, at a locality called "The Sting," on Upper Monynut, in the Lammermoors, a place far from human resort, and almost unvisited except by the shepherd and his wandering charge, there was above forty years ago a colony of wild cats. They inhabited holes in the banks. A wild sort of being nicknamed "Tin Tam," for he was a tinsmith, who helped to eke out his livelihood by capturing badgers to send to innkeepers in towns to be baited with dogs, carried off the last "clecking" of the cats, mother and all, and thus extinguished the breed. An acquaintance, however, tells me that since then he, in his boyhood saw what he took for a Wild Cat—and he knows the real Wild Cat—in Belton wood; perhaps a straggler from the Highlands may have prowled thus far. Cat-craig, now quarried away for lime, on the coast east from Dunbar, may be a reminiscence of this animal.

John Purves, whose father was tenant at Fallow-knowe, on the edge of Coldingham Moor, Berwickshire, states, that when a boy herding the cows near the Press woods, which were then a haunt of the Wild Cat, one of the cats "lap at him" and his dog.

"Like mountain-cat who guards her young,
Full at Fitz-James's throat he sprung."

But the best account of a fight with a Wild Cat, is that

* Bonney's "Alpine Regions of Switzerland," p. 170.

which I received in a letter, dated 17th January, 1853, from Mr. James Telfer, the poet, long school-master at Saughtree, in Liddesdale. "Keilder," he informs us, "was, till towards the middle of last century, a great place for Wild Cats, or, as they are called, *Wulcats*. An old shepherd, John Hutton, of Peel, who died only ten or twelve years ago, aged above eighty, used to say that when he was a young lad the Keilder herds very seldom went to their sheep without seeing one or more *Wulcats*. And my own grandfather, a shepherd, was once nearly worried by a *Wulcat* in Keilder. The animal attacked him without provocation, with the utmost ferocity, aiming at his throat; and it was not without both danger and difficulty that he (a tall, stout man) overmastered it. He *kepp'd* it (in its spring) with his arm, but was unable to shake it off; he, however, managed to get it to the ground, and to plant his knee upon it, and then, with the help of his colley dog, he finished it. When relating the circumstance afterwards, my grandfather always said that if he had not had the dog to assist him, the *Wulcat* would have worried him. It was a great, overgrown animal. On being stretched on the ground after it was dead, it was found to be, from its length and girth, bigger than the colley—of course it would be shorter in the legs. My grandfather died thirty years before John Hutton, and I think he would be about eighty when he died. He died in 1805 or 1806. His encounter with the cat happened when he was a young man. I am not sure whether he was herding or hunting in Keilder at the time. Keilder, in former times, was a sort of jungle of natural wood—there was a deal of natural wood in it, John Hutton said, in his early days. There is a certain part in Keilder called *The Grewhound Law*. It is supposed to have got the name from its being the only part in Keilder where, on account of the wood, it was practicable to hunt with *grewhounds*."

"*Wulcat*," or "*Wullcat*," is the name which the animal carried in Berwickshire; as also elsewhere in Scotland, *vide* "*Jamieson*." A correspondent, who signs "*R. P.*," assures us that by this name also it was known in Roxburghshire. "As a proof of this, I may refer to a place, within a mile or two of Jedburgh, called the '*Wulcat Yett*.' I have referred to several Jedburgh people, and all say that it is the correct spelling of it. I remember what was to some rather an amusing incident. One of the ministers of Jedburgh had an intimation to make from the pulpit about a visitation or

baptism at the place, and wishing to speak proper English, named it 'Wild Cat Gate.' Many of the people were inquiring where *in the world* such a place was. No doubt all would have known readily had he said Wulcat Gate or Yett. The name shows the animal was not unknown in this part also." There is likewise a "Wild Cat Gate" in the vicinity of Hawick.

Mr. Borthwick is unacquainted with the form "Wulcat," but he has been accustomed to hear the natives of Ewesdale and Eskdale "in their broad pronunciation of words, in speaking of Wild Cats, call them 'Woll-gats.' Some fifty years back, in Ewesdale, a Wollgat of great size was killed at Meikledale, and having been stuffed, it was for many years to be seen in the possession of the old laird thereof, by whose people it was destroyed. Our remembrances of it are that it resembled a very young tiger's cub, such as are occasionally to be seen in menageries."

Chalmers in his "Caledonia," as evidence of the "ancient stock of the woody districts" of Roxburghshire, adduces "Cat-lee-burn in Southdean, and Cat-cleugh in Liddesdale."* The assumed connection of these with the Celtic *cat*, war, is not worth consideration. There is also a Catcleugh in the Alston Moor district in Northumberland.

In North Northumberland, Mr. Selby, writing the "Fauna of Twizell," in 1837, was positive that "the Wild Cat was to be found, not more than twelve years ago, within a distance of three miles."† At Spindlestone Hill there is a fantastically shaped crag of whinstone, full of crevices, named the "Cats' Craig," from its being at no very remote period a recognised resort of the native cat. In the parish of Ford, there is a farm originally having the name of Catford, but now changed to Hay Farm; after one of its occupants, which may have been likewise a refuge for them in the olden time. Chatton may signify the town of cats, situated as it was on the verge of wooded parks where wild animals were reserved for sport. If so, the word has retained the Norman orthography. The Anglo-Saxon name does not differ from our own, viz., "wild catt." At the foot of Cheviot, above Langleyford, in Harthope Burn, is the "Cats' Loup," a deep gulf cloven by the stream during its passage through the rocks. It probably refers to some notable chase after one of those objects of popular dislike, which none of the present race of shepherds, who are mostly of Scottish origin, can relate.

* Vol. ii., p. 132.

† "Magazine of Zoology and Botany," vol. i., p. 424.

Some Localities for Plants in addition to those recorded in "Natural History of the Eastern Borders." By ANDREW BROTHERSTON, Kelso.

THALICTRUM MAJUS, Sm.=*FLEXUOSUM*, "*Bab. Man.*" Rocks on Tweedside at Roxburgh Newtown, and Gaitheugh.

FUMARIA DENSIFLORA, D. C.=*MICRANTHA*, Lag. In the Glebe at Yetholm. I believe this species will be found to be frequent in the district (See "*Proc.*," 1873, p. 135).

NASTURTIUM PALUSTRE, D. C. Plentiful in many places on Tweedside, from below Kelso upwards to Gala; sides of the Eden near Ednam; the Glen near Ewart, &c.

CARDAMINE HIRSUTA, L. Abundant, many places near Kelso; near Dryburgh Abbey I have seen it growing along with *C. sylvatica*, Link., each keeping its distinctive characters.

ALYSSUM CALYCINUM, L. Kelso and Springhall on Tweedside.

ARABIS THALIANA, L. Stichill, Trows, Dryburgh, Makerston, &c.

LEPIDIUM SMITHII, Hook. Straggling specimens on Tweedside. From the great plenty of this plant on the Leader and several of the rivulets that run into it, and also on the Ettrick, it ought to be more frequent downwards; evidently there is something either in the soil or climate that prevents its increase in this neighbourhood. On spots where I have observed healthy-looking, well seeded plants one year, the next there would be no appearances of it.

SENEBIERA CORONOPUS, Poir. Roadside, Highridgehall.

SILENE NOCTIFLORA, L. Abundant on gravelly knowes in corn-fields, and occasionally on Tweedside.

POLYCARPON TETRAPHYLLUM, L. Sides of Gala below Galashiels (July, 1874). Mr. Stewart found it at the same place in 1868 (see "*Proceedings*," 1869, p. 79).

GERANIUM PUSILLUM, L. Plentiful about Kelso, both on the river and road-sides; Pallinsburn.

GENISTA TINCTORIA, L. Plantation near Whitton (D. Douglas).

MELILOTUS OFFICINALIS, Willd. Fields, Clifton Hill, Harperton, &c.; plentiful on a bank at the road-side near Rutherford Station; frequent on Tweedside.

„ *LEUCANTHA*, Koch. On the road-side between Ednam and Kelso.

TRIFOLIUM ARVENSE, L. Banks of the Tweed at Trows and Makerston; Bowmont water, &c.

VICIA LATHYROIDES, L. Rocky knowes at Stichill along with *Trifolium striatum* and *Potentilla argentea*; Sandyknowe Crags, and on Tweedside at the Scurry rock, near Sprouston.

„ *ANGUSTIFOLIA*, Roth. Not uncommon on dry banks in the neighbourhood of Kelso. The var. *Bobartii*, Forst., I have seen in the vale of the Bowmont above Primside Mill.

- POTENTILLA PROCUMBENS, *Sibth.* Sides of "Smiddy burn," Ednam.
- SANGUISORBA OFFICINALIS, *L.* Island at Lochton (D. Douglas).
- RIBES ALPINUM, *L.* Dryburgh and Bemersyde.
- MYRRHIS ODORATA, *Scop.* Plantation at Ferniehill and old pasture at Sprouston; plentiful on the banks of the Tweed above the mouth of the Ettrick.
- TORILIS NODOSA, *Gaertn.* Fields at Clifton Hill and Highridge-hall.
- ADOXA MOSCHATELLINA, *L.* Common in shady damp places both on Tweed and Teviot.
- FEDIA DENTATA, *Bieb.* Fields at Lochton, Highridgehall, Sydenham, Lochtower, &c.
- SCABIOSA COLUMBARIA, *L.* Rocks at Makerston; plantation near Hendersyde East Lodge; Tweed banks near Lochton; quarry at Wideopen, &c.
- ANTHEMIS ARVENSIS, *L.* Frequent in pastures as at Lochton, Lochtower, Highridgehall, near Melrose, &c.
- CHRYSANTHEMUM SEGETUM, *L.* Rare in this district; field at Hendersyde, and slopes of the cutting of a new road at Edenhall.
- DORONICUM PARDALIANCHES, *L.* Occurring in large beds on Tweedside—Sharpitlaw, Anna, Rosebank, Merton, Bemersyde, &c.
- SENECIO ERUCIFOLIUS, *L.* Not uncommon in the district southwards from Mellerstain.
- CARDUUS TENUIFLORUS, *Curt.* "Waste places and road-sides, common" (East Bor.). Only near the sea, I have never observed it inland.
- „ HETEROPHYLLUS, *L.* Dean near ruins of Thirlstane Castle, Lauder.
- HELMINTHIA ECHINOIDES, *Gaertn.* A solitary plant in Lillies lane, Kelso.
- LACTUCA VIROSA, *L.* On wooded bank at Merton.
- HIERACIUM CROCATUM, *Fries.* Rocks at the head of Henhole, Cheviot. It also grows on rocks in Caddon water, about a mile from where it enters the Tweed; the leaves of the Caddon plants are broader than those from Henhole;—it is a very variable species. "Plentiful at Heathpool Linn, both the narrow and broad-leaved varieties." (James Hardy and J. G. Baker, "New Flora of Northumberland and Durham.")
- CAMPANULA LATIFOLIA, *L.* Springwood Park and Newtondon Woods.
- PYROLA ROTUNDIFOLIA, *L.* Primside bog.
- MYOSOTIS SYLVATICA, *Ehrh.* Abundant in most of the woods on Tweedside, from below Kelso up to Bemersyde; white and pale blue varieties are frequent.
- „ COLLINA, *Hoffm.* Banks of Tweed and Teviot on dry places, abundant.

ANCHUSA SEMPERVIRENS, *L.* Road-side near Old Greenlaw; Makerston Woods; road-side near Clifton-cote, Bowmont Water; Hirsell Woods, &c.

SYMPHYTUM OFFICINALIS, var. *PATENS*, *Sibth.* Tweedside at Rosebank; Bemersyde, &c.; sides of Eden.

„ *TUBEROSUM*, *L.* Newtondon Woods, on banks below the Linn; Makerston, near Trows Crag.

ASPERUGO PROCUMBENS, *L.* A straggler in Lillies lane, Kelso.

SOLANUM NIGRUM, *L.* Not uncommon as a weed of cultivated ground about Kelso; Mr. T. Henderson also finds it as a garden weed at Middlethird.

LATHRÆA SQUAMARIA, *L.* This curious looking parasite seems to be increasing in this district. Last spring it was in abundance in several places where formerly there were only a few plants: it apparently prefers poplars. Lochton, Sharpitlaw, Rosebank, Maxwellheugh Mill, &c.

VERONICA MONTANA, *L.* Common in low moist woods on Tweed-side: Rabbit-braes Plantation; Hendersyde, Springwood Park, and Makerston Woods; Rutherford Plantations, &c.

„ *BUXBAUMII*, *Ten.* Everywhere common in this district.

SCROPHULARIA EHRHARTI, *Stev.* It is this species, not *aquatica*, that is so plentiful on the Eden. I have not observed typical *aquatica*=*Balbisi*, Horn., in that part.

VERBASCUM THAPSUS, *L.* Banks of Tweed at Lees, Floors, and Makerston; Kale Water near Grubbit braes.

MENTHA VIRIDIS and *PIPERITA* are frequently met with, sometimes in large beds, both on the river and ditch sides, often outcasts of the garden. A short distance above Heathpool Linn, there is a large patch on each side of the College, of a large, broad, coarsely serrate-leaved Mint*, which if not *alope-curoides* approaches very near it. Our Border *Mentha* sadly want clearing up. Most likely the Heathpool Linn plant is an escape, as Mr. Hardy has seen the same in shepherds' gardens. Straggling plants of *M. variegata*, Sole, are to be picked up on Tweedside, but there is no doubt of it being an escape.

GALEOPSIS LADANUM, *L.* Field at Ednam, August, 1860; I have not seen it since in this district.

LAMIUM INTERMEDIUM, *Fries.* Cultivated ground, Kelso.

STACHYS BETONICA, *Benth.* Oxnam Water above Crailing (G. Robertson). Rare in this district.

„ *AMBIGUA*, *Sm.* Tweedside near Shepherd's Bush.

„ *ARVENSIS*, *L.* Frequent in cultivated land: Kelso, Ednam, Harperton, Highridgehall, Trows, etc.

* I noticed (1874) a patch of this a little below Southern-knowe when crossing the College; also in an islet of Wooler Water at the turn going up to Coldgate Mill; and as a garden outcast at Middleton Hall shepherd's house.—J. H.

CALAMINTHA ACINOS, *Clairv.* Plentiful in pastures on the high ground at Lochtower and Primside.

„ CLINOPodium, *Benth.* Frequent on Tweedside.

LYSIMACHIA NUMMULARIA, *L.* Damp places in Makerston Woods, plentiful; Tweedside near Abbotsford.

LITORELLA LACUSTRIS, *L.* Yetholm Loch, plentiful.

POLYGONUM BISTORTA, *L.* Springwood Park Woods, and near Wooden Linn.

EUPHORBIA ESULA, *L.* Gateshaw; Berwick Walls.

„ EXIGUA, *L.* Frequent in fields. It has occasionally five rays, and in a stubble field at Highridgehall, September, 1872, it was abundant with two rays; or, if any of the plants showed the third, it was quite small in proportion to the others.

SALIX PURPUREA, *L.* Rather rare, only occasional plants along Tweedside; when dried difficult to distinguish from *S. Helix* (which is very common), but when seen growing the habit is very different—*purpurea* being decumbent, whilst *Helix* is erect.

„ RUBRA, *Huds.* On railway bank near Wooden; Osier ground at Spylaw; in the hedge on roadside between Dryburgh and St. Boswell's; Tweedside, near the mouth of the Whiteadder. See also "Proc.," 1872, p. 439. Probably of frequent occurrence throughout the district.

EPIPACTIS LATIFOLIA, *All.* Frequent about Kelso; in Springwood, Hendersyde, and Newtondon Woods. On Tweedside above Lint Mill and at Trows; Kaebras, below Roxburgh Castle, &c.

LISTERA OVATA, *R. Br.* Abundant in Newtondon and Hirsell Woods.

ORCHIS INCARNATA, *L.* This species, sub-species, or variety (as different botanists have it) is sometimes met with amongst the Cheviots. The best distinctive character between *incarnata* and the nearly allied *latifolia*, is in the form of the leaf; that of *latifolia* is broadest about the middle and flat at the tip, of *incarnata* broadest at the base and concave (boat-shaped) at the tip; it (*incarnata*) is also later in flowering.

GOODYERA REPENS, *Brown.* Evidently this boreal plant is increasing in this neighbourhood. In addition to the Mellerstain and Graden stations, I saw it growing in profusion in Rutherford Plantations in July last. Dr. Johnston's idea—that their seeds (referring to *Pyrola minor* and *Linnæa borealis*) have lain buried in the soil since the ante-Roman period, when all this part of the country was covered with a forest, and that they spring up when circumstances are favourable for their development—is especially applicable to the *Goodyera*. Since I first saw it in Charter Plantation in August, 1859, it has

increased greatly. Apparently it has not been so long established at Graden (where it was discovered by the Rev. Messrs. Mackerron and Davidson), being much thinner in the ground. I have no doubt that if these woods were cut down, the *Goodyera* would again disappear, and remain in a dormant state until such time as the ground was suitable for its existence, when it would reappear and take its place as at present. From the report of the "Botanical Locality Record Club," I see that the almost extinct *Cypripedium Calceolus* has been found lately in two of the magnesian limestone denes of Durham (not the old recorded Castle Eden Dene). But the opposite course is required to revive its dormant energies. In one of the denes it was brought about by the cutting down of trees and underwood; and in the other "it was noticed that it seemed to grow only on spots where a slip of land occurred, or rather the sliding down of soil from the steep banks: which circumstance no doubt resulted similarly in sunlight reaching the slopes of soil overturned and left bare."

ALLIUM SCORODOPRASUM, *L.* Sides of burn at Learmouth, sparingly (Wm. Kerr).

„ *OLERACEUM*, *L.* Plentiful on Tweedside, both above and below Kelso.

TULIPA SYLVESTRIS, *L.* Makerston, Merton, and Dryburgh.

JUNCUS COMPRESSUS, *Jacq.* Close to the edge of the Tweed below "Corbie Crag," Makerstoun. This is the only spot where I have detected the typical inland plant in the district. But it is very probable that it will occur elsewhere on the river side.

ARUM MACULATUM, *L.* In great abundance on the wooded bank at Pinnacle Hill; also at Springwood, Hendersyde, etc. This has every appearance of being wild in this district.

POTAMOGETON OBTUSIFOLIUS, *M. and K.* Pond at Floors; possibly the *P. gramineum* of "East Bord."

„ *PECTINATUS*, *L.* Plentiful in the Tweed, Teviot, and Yetholm Loch.

SCIRPUS FLUITANS, *L.* Ditches in Falside Hill bog.

„ *SYLVATICUS*, *L.* Sides of the Teviot below Roxburgh, and Eden above Ednam.

CAREX REMOTA, *L.* Tweedside below Hendersyde.

„ *PANICULATA*, *L.* Boggy ground at Yetholm Loch, Hirsell Loch, etc.

„ *MURICATA*, *L.* Rocky ground, Makerston.

„ *SYLVATICA*, *Huds.* Not uncommon in woods about Kelso.

„ *DISTANS*, *L.*—from the mouth of the Whiteadder—is struck out from the list as being *C. binervis* ("E. B.," 206). I have not seen it; but I have true *C. distans*, which I got on the coast near Gunsgreenhill, in June, 1873.

„ *HIRTA*, *L.* A glabrous var., at north-east end of Yetholm Loch.

CAREX VESICARIA, *L.* Not uncommon in boggy places, as at Yetholm Loch, Spylaw Pond, etc.

POA COMPRESSA, *L.* Near Kelso Abbey; on an old wall at Harperton.

GLYCERIA PLICATA, *Fries.* Near Hendersyde East Lodge. Var. *pedicellata* near Ednam.

FESTUCA LOLIACEA, *Huds.* "Very rare" (East Bord.) Frequent in this district: roadside near Newtonlees; haugh at Ednam; Teviot above Roxburgh Castle, and several places on Tweed-side.

„ GIGANTEA, *Vill.* In many of the woods on Tweedside.

AVENA STRIGOSA, *Schreb.* In 1873, intermixed, and equally plentiful, with the typical plant, in fields to the north from Kelso; there was a variety with *black* seeds. Thinking that the colour might perhaps be owing to the stage in which they were gathered, I sowed some seeds of each (black and white) sort. Both came true without any mixture of the other colour amongst them. Has the same variety been observed elsewhere in the district? [Mr. Baker says of this "I never saw the black seeded form before."]*

BROMUS RACEMOSUS. What is *B. racemosus* of the "Eastern Borders"? There is no specimen with the name in Dr. Johnston's Herbarium in Berwick Museum, and only one in Kelso Museum, and it is *commutatus*, Bab. We have all the forms in this district that there is any chance of confounding under the above name: *B. racemosus*, Parn. (a variety of *mollis* now called *subglaber*); *Serrafalcus racemosus*, Parl.; and *S. commutatus*, Bab. The two last named plants are different in "Bab. Man.," 6th ed., from those under the same names in the "Stud. Flora." In the latter work the spikelets of *commutatus* are *shorter* (perhaps this is a printer's error?) than those of *racemosus*; while according to Babington it is the opposite. Hayward's "Pocket Book" (a first-rate book for the pocket) follows the "Stud. Flora."

TRITICUM CANINUM, *Huds.* Plentiful in many of the woods on Tweedside.

HORDEUM MURINUM, *L.* Sprouston village.

POLYPODIUM DRYOPTERIS, *L.* On the road-side and in plantations north from Hume.

ASPLENIUM SEPTENTRIONALE, *Hall.* Rocks on Tweedside above Kelso.

SCOLOPENDRIUM VULGARE, *Sym.* Wall at Newtondon. "Rutherford Plantations."—Dr. J. P. Bookless.

BOTRYCHIUM LUNARIA, *Sw.* Plentiful on links about quarter of a mile south of Sandbank Lime Kiln, near Scremerston, and also in the same sort of habitat near Goswick.

* Both varieties are already recorded in the Club's "Proceedings," Vol. iv., p. 155 (1859). The black seeded variety is the most common in the East of Berwickshire.—J. H.

Ornithological Notes. By ROBERT GRAY, F.R.S.E.

THE following notes, bearing on the occurrence and habits of some of the birds of East Lothian, have been made chiefly within the last few months, and are offered as a short contribution to the Club's "Proceedings." After a lapse of nearly thirty years I find but little change in the winged fauna of the county, with the exception, perhaps, of the excessive increase of the Wood Pigeon. A few years ago, I ventured a surmise that the very large flocks of this bird which are often seen during the winter time, have not been reared in this country, but are made up of migrants from more northern districts; in proof of which instances have been cited of the arrival of "clouds of pigeons" on the sea shore both in Haddingtonshire and Mid-Lothian. The extraordinary slaughter of Wood Pigeons within the limits of the county itself, which has resulted in no apparent diminution of their numbers, may be accepted as another proof that strangers have filled their place.

Birds of prey, as a rule, have of late years been subjected to various destroying influences throughout Scotland. East Lothian may not have suffered more than other counties, if, indeed, so much; but the fact remains that, with the exception of some of the Owls, few raptorial birds can now there be called native species. Their presence in winter, when they are most seen, is almost entirely due to their wandering habits at that season of the year; though in some instances it may be traced to the passage of migratory flocks, as has been known in the case of the Rough-legged Buzzard and Short-eared Owl. Game preservers and egg collectors are now the worst foes of these interesting birds; which nothing, apparently, can save but an intelligent interest in their fate among these two classes. That such a feeling (aided, perhaps, by the operation of the gun tax) is already gaining ground in some parts of Scotland, can scarcely be questioned. Peregrines have resumed eyries that have been long deserted; the Kite and the Osprey have successfully reared their broods within the last two years; and there can be no doubt that both our British Eagles (the Golden and White-tailed) are now so far protected as to justify a hope of seeing them at no distant date return to their old haunts in the southern counties.

MARSH HARRIER (*Circus aeruginosus*).—A very fine

young male was shot at Seacliffe, East Lothian, on 10th October, 1874, and exhibited by Dr. Smith at a meeting of the Royal Physical Society, Edinburgh. This specimen, like all the others I have seen killed in the county, was in immature plumage, being of chocolate-brown with a yellowish-white patch on the occiput.

PIED FLYCATCHER (*Muscicapa atricapilla*).—A male bird of this species, now in my collection, was shot at North Berwick by Mr. W. Paterson, on 23rd May, 1872. Another, which I have seen, was procured near Prestonkirk in the beginning of May, 1870. It has already been recorded in several instances as a Berwickshire species.

SNOW BUNTING (*Plectrophanes nivalis*).—Snow Buntings occurred in very large flocks along the coast from Gullane to Granton, early in December, 1874. The severe frost, however, which set in shortly after their arrival, broke up the flocks, and hundreds of the birds perished in the snow-storm which ensued.

GREEN SANDPIPER (*Totanus ochropus*).—This bird—one of the scarcer of our Scottish Sandpipers—seems now much more common than it was thirty years ago. I have in several instances heard of its following the windings of the Forth. A specimen shot at Innerleithen, in Peeblesshire, on 15th August, 1874, seems sufficiently near the confines of Berwickshire to merit remark.

LITTLE STINT (*Tringa minuta*).—Thirty years ago, this diminutive Sandpiper was extremely rare in any part of Scotland. It may now, however, be regarded as a regular winter visitant to the eastern counties, ranging in its distribution from Berwick to Aberdeen. It is met with every autumn in the estuary of the Forth by my friend Mr. Harvie Brown, who has repeatedly shot it on its first arrival. This usually happens about the middle of September, but specimens are often obtained later in the season.

PURPLE SANDPIPER (*Tringa maritima*).—Flocks of young birds of the year have been met with during the present winter along the shore near North Berwick: some of the specimens obtained, and which I had an opportunity of seeing, were very small, but in most beautiful plumage, and shewed here and there broad patches of the fine purple hue which characterizes the species. In 1869, as I am informed by Mr. Small, of Edinburgh, this bird was very plentiful on the coast between Leith and Longniddry.

GREY PHALAROPE (*Phalaropus lobatus*).—A specimen, in poor condition, was killed on Gullane Sands, by Mr. Scott Skirving, in October last. It is a somewhat curious fact that many specimens of this Phalarope have been killed during the past two winters on the banks of the Nith, near Dumfries: one was shot near New Galloway, which is still further inland, on 23rd October, 1874.

BEAN GOOSE (*Anser segetum*).—A very large flock of Wild Geese, presumably of this species, was seen in East Lothian, on 12th April, 1874, flying northwards. The birds attracted great attention; they were travelling at no inconsiderable height, and occupied a large tract of the sky from the point of observation. The line formed must have extended nearly a mile: it was unbroken, and contained three separate < shaped companies—the whole creating a spectacle of unusual interest.

PINKFOOTED GOOSE (*Anser brachyrynchus*).—Two very fine specimens, which I examined in the flesh, were shot at Gosford, on 1st January, 1875, and were stuffed by Mr. Small for a gentleman who purposed using them as decoys. This species frequently occurs on the Forth during winter, many examples having of late years come under my notice.

BERNICLE GOOSE (*Anser leucopsis*).—This species has been very abundant on the coast during the present winter, near Gullane. Four specimens were shot, two of them at Castlemains, on 16th October, and sent to Mr. Small for preservation. I was informed that a flock of about two hundred was seen near North Berwick about the same time. The first specimen was obtained on 19th September. I have always looked upon this bird as a scarce species in the East of Scotland.

EGYPTIAN GOOSE (*Anser Egyptianus*).—A fine male was shot near Dunbar on 8th December, 1873, and forwarded to me by my friend Mr. Jaffray, who informed me that a female was shot at the same time and place. The two birds came from the south, and were observed travelling together along the shore, and apparently making for the estuary of the Forth. They were shot in a salt-water creek where they had alighted.

SHOVELLER (*Anas clypeata*).—A young male was shot at Gullane by Mr. R. Scot-Skirving, in October, 1874. The species seems regularly to frequent the Forth, chiefly in the months of November and December. I have seen various

examples obtained at Kincardine by the punt shooters, who pursue their vocation there.

WIGEON (*Anas Penelope*).—Has been very plentiful this season in many parts of the county. Among wildfowl this duck appears to have suffered very much during the recent storm—many of the specimens obtained being reduced to bones, skin, and feathers.

RED-THROATED DIVER (*Colymbus septentrionalis*).—The Red-throated Diver seems very abundant this season on the east coast, as many as from twenty to thirty having been seen in one day at Queensferry. Mr. Small informs me that he had twenty sent in for preservation in a single week. These birds may be presumed to be of Scandinavian origin. A beautiful specimen was shot at North Berwick on 5th January, 1875, shewing faint traces of the gular patch, which is the earliest appearance of a seasonal change that I have noticed in this species.

LITTLE AUK (*Mergulus melanoleucos*).—A specimen, much wasted, was found alive at Prestonpans on 5th December, 1874, and another, in fine condition, was shot at Dunbar on the 11th of the same month. It seems to occur every season in a crippled state, even at some distance inland. I have elsewhere treated of its occurrence off shore.

SANDWICH TERN (*Sterna Boysii*).—This fine Tern still breeds in limited numbers on the rocky islands in the neighbourhood of North Berwick. Within the last twenty-five years, however, this species has gradually retired from its summer quarters there, and is now found more plentifully on the Fife coast, where it breeds near the mouth of the Tay. A few pairs frequent Inch Mickery, between Cramond and the opposite shore.

KITTIWAKE (*Larus tridactylus*).—I observed very large numbers of this beautiful gull, chiefly in immature plumage, at Granton and Newhaven, last month, flying within a few feet of the public road. This bird is now a well established winter visitant from Arctic waters; having been seen and procured of late years both on eastern and western coasts, from November to March, when they appear to migrate northwards, and are replaced by the home-bred birds which had, in the previous autumn, gone southwards.

GLAUCOUS GULL (*Larus glaucus*).—This conspicuous sea-gull may now be regarded as a regular winter visitant to the north in considerable numbers. Four adult specimens

were seen at Musselburgh, on 18th September, 1874. I have seen as many as two hundred Glaucous Gulls in one day at Kincardine-on-Forth, and have examined upwards of twenty that were shot there within a few hours.

RICHARDSON'S SKUA (*Lestris Richardsonii*) has been seen, and procured, in unusual numbers this winter along the coast from Coldingham to Cramond.

ROBERT GRAY.

13, *Inverleith Row, Edinburgh*, Jan. 18, 1875.

On Iron and Iron-slag, &c., found at Worm Law and Yeavinger. By JAMES HARDY.

I HAVE constantly endeavoured, when I had opportunity, to re-examine the scenes of the Club's excavations, after the weather has repeatedly acted on them, as then objects are not unlikely to be revealed which had escaped the unpractised eyes of the diggers. It was thus, to select an illustration from the subject about to be spoken of, that I picked up the only flint (a mere chip, in my opinion) obtained on the summit of Yeavinger Bell (Vol. iv., plate xvi., fig. 1), in one—that on the left-hand—of the guard-houses of the south entrance to the great enclosed area, after the search had been given up. I have now to make another observation, respecting something unexpected, that revealed itself on a recent visit to the scene of those investigations; although it is, I confess, rather akin to the result of that remarkable event, the exploration of the “Kaim of Kinprunes.” On the 18th July, 1873, I accompanied the late Mr. Robert White, the well-known author of “Otterburne,” “Bannockburn,” &c., to view the numerous traces of British occupancy, so manifest on all sides, and to ascend the hill. It was a memorable day, for the kindly old man had travelled all the distance from Newcastle, that we might become better acquainted with each other, than through the medium of several years' correspondence. The hill was not a stranger

to him, he having, in middle life, sojourned for a little while in a cousin shepherd's house, which was that called the old palace, but which is actually the pele-tower of Old Yeavinger. For this, and not the modern steading, is the seat of the primeval Saxon occupants of the territory of Gebrin, Gefrin, or Yevern. Crossing from Akeld towards the base of the hill, we passed the burn, and after measuring the prostrate monolith, which we pronounced it to be, not aware of its having been previously determined for certain, we proceeded to look at the broken top of the tumulus at Worm Law. The workmen placed at the Club's service had here, at only two feet depth, struck upon a cist, over which, among the accumulated earth, were scattered fragments of pottery, shattered flints, and some iron-slag. The iron-slag puzzled our friend Mr. Tate very much to account for, and it is to afford a possible explanation, that I mention the incident that fell under our inspection that day. At the depth of half-a-foot in the section made by the cutting, which had been rubbed into the quick by sheep, we noticed a rusty article projecting, and proceeding to extract it, obtained a longish piece of flat iron, very much decayed, and doubled up the one portion over the other. On handling it, it broke at the bend. One of the pieces was more tapering, or worn away, than the other. It exactly resembled, and we decided that it was, a fragment of an old cart hoop, of a cart with narrow wheels; and we thought it possible that gypsies might have encamped at one time on the clean grassy space round the barrow, free as it is from the everywhere encroaching brackens, and that this might be a remnant of their leaving, for old gypsies did not traffic in scraps of iron. Moreover, we may suppose, that here taking advantage of the circular mound, so suitable for the purpose, they levelled the summit of the barrow, and on the ring thereof repaired or recast their outworn cart hoop—for they were adepts in smith-work;—that the slag was a product of their fires on that occasion, and that the old metal we had drawn forth was too imperfect to be retained, and had been twisted up, perhaps to test it, and then cast aside. This will account, also, for the earth over the cist being so shallow. I had previously a notion that the sheet-lead, discovered in a superficial situation in one of the neighbouring fortlets, had been conveyed thither by some of that ready-fingered clan. Who else could have had an iron-hoop up there? I

make the statement, because in estimating the probable age, when rude simple tombs of the nature of the one in question were constructed, it is of some value to know in what manner modern materials of yesterday, might get intermixed with the very old and primitive relics of a departed people, and become productive of grievous misconceptions.

But the association of slags with the barrow may admit of another construction, which after all may be the more correct. The mere accident of iron-slag in a barrow is not proof positive that the existence of the malleable metal was a coeval fact. In the case now under consideration, there is an unsuspected reason for the presence of slags, owing to the drift which overspreads the lower Cheviots, containing fragments of red hematite. There is a good example of this in the south-western bank of the Harehope camp, a mile or two south from Yeavinger, where I collected near some rabbit burrows many fair specimens of the pure ore; which also crops out in several ravines among those hills. Should any of this ore have become an accidental constituent in the soil on the spot where cremation of the dead was practised, it would be liable to melt, wholly or partially; the bones of the carcase as well as those cast in from the funeral feast, acting as a flux. I know several instances of this. In my own neighbourhood, within the circuit of a ploughed-out British camp, iron clinkers, which have been produced under the sites of ancient fire-places, where bones and sea-shells have been roasted or burned, can readily be collected in quantity. The slags are also disseminated throughout the neighbouring field, and whenever I observe them, I infer that hut-circles had existed not far off in pre-historic epochs. These clinkers were owing to the great heat having partially smelted a coarse red hematite, occasionally present in some layers of marly, old red sandstone, subjacent to the subsoil. Both are curious examples of the frequency with which these old people must have almost approached the brink of discovering metallic iron, without having the capacity to interpret what must have been a familiar phenomenon.

Some years preceding the excavations on Yeavinger, a bronze tripod, or pot, was dug out in one of the low fields on the farm by some workmen casting drains. It was for some time in possession of the tenant, but where now deposited I have not ascertained. These tripods are not

indicative of any special period ; they may be either British or Saxon. They are significant of the mortal terror of their owners in presence of a deadly enemy or successful invader. The light moveable goods were hurried off, and the domestic coppers were pitched into the nearest quagmire or well-eye. Nothing that might yield any advantage was left. There appears to have been no expectation of ever recovering them again.

On some Flint Implements of Prehistoric People in Berwickshire. No. II. By JAMES HARDY.

THE search after wrought flints in cultivated fields has since my last paper, "History of the Club," Vol. v., p. 410, been prosecuted at every favourable opportunity. They are best discerned when the crop is turnips, in the foldings for sheep, for then the shepherd and his assistants, having to pick up the turnips individually, and flint being an alien as well as sometimes a useful article, they are less likely to escape. The ground is the same as that formerly examined, and the flints obtained at Penmanshiel were entirely on lands enclosed from a state of waste, which makes them less likely to be worn out gun flints or strike-a-lights. One of the most valuable of the new disclosures is the fine flint axe, which was found on what was recently a heathy moor, sprinkled over with small barrows composed of stones, thinly protected with turf. These were levelled and partially excavated to permit of agricultural operations, but the foundations are as yet mostly unexplored and may be still further productive. There are no cists in these barrows, or symptoms of any human remains. I tried several, and they did not differ in structure from a couple of cart-loads of stones piled together on the surface, there being little or no indentation in the soil. Some larger examples have been more elaborately constructed and are deeper rooted ; of a circular form with a hollow centre, after the model of a hut-circle. I am again indebted to Mr. Middlemas for the

beautiful drawings presented in the accompanying engravings, without which this account would lose the best part of any interest it may possess. The figures are of the natural size. I adopt the divisions of the previous paper.

I. FLINT-AXE.

1. The half-polished flint-axe, Plate I., belongs to an intermediate period, between the entirely chipped implement and that with the whole surface smoothed by friction. It is most polished on the side opposite to that represented in the engraving. It appears to be almost new, there being small portions on both sides of the external white chalk, whence it had been selected by its maker, still remaining without a stain. The original flint had been of a thin wedge-like shape. It is of a blackish flint in the mass, but greyish-brown where fractured by chipping. The chipping is rude. It had been inserted in the helve, or covered by the fastenings, more than half its length, so that only one-and-a-half inch of the face was serviceable. I infer this from the smooth varnished marks impressed on the flint by the thongs that had secured it, the lines of which are still very distinct, passing from the one side to the other. A forked or split stick may have furnished the handle. As it appears never to have been used, it was probably a votive offering, having no reference to future warfare in the "spirit-land." For a corresponding example, Mr. Evans' figure 33, from North Yorkshire, may be compared, "*Ancient Flint Implements*," p. 80. Found at Penmanshiel, 1873.

II. ARROW HEAD.

2. This minute arrow head, Plate iv., fig. 7, was picked up in "Halkett's field," on Horsley farm, October, 1873. The edges, although not regular, are carefully wrought. The engraving shews the roughest side. Its nearest counterpart is Evans, fig. 311, from Yorkshire Wolds. This is of light grey flint. The field lies near to Brockholes farm. It is not very distant from the great British camp on Warlawbank hill, that has recently been ploughed over. There were till lately fragments of ancient earthen dikes on Horsley, but they are now effaced by cultivation. Several cists have been come upon on Brockholes farm.

III. SCRAPERS.

3. Mussel-shaped scraper, Plate ii., fig. 4. This is an approximation to the kite-shaped form, arising from the shape of the outside splinter out of which it is fashioned. The cutting edge has been given at one stroke, with little secondary trimming, but it has taken six strokes to bring the body of the flint to slope to

this edge. Found in a turnip-field at Penmanshiel, which in a state of nature produced stunted birches, whence it still bears the name of "Short Birks." There yet remain small tumuli in that portion of the wood which screens the field. It lies on the bank above the post-road. The flint is of a light grey.

4. Straight-edged flint, Plate iii., fig. 2. This appears to be an example of Mr. Evans' straight scraper, fig. 225. It is a whitish grey flint of a glassy lustre, chipped only on one face, and has apparently passed through fire. As Mr. Borlase notes of Cornish flints found in barrows, it may have afforded the means of kindling the fire which reduced the body to ashes, and then been cast among the embers. (*"Nænia Cornubiæ,"* p. 272.) Found in a field near Harelawside farm, where once stood many tumuli and cairns, winter 1873-4.

5. Long horse-shoe shaped scraper of light grey flint, Plate iii., fig. 2. The flakes have been struck off from the thick end. The edges are finely chipped all round. It closely resembles, Evans, fig. 210, Yorkshire Wolds; but that example has required more labour. "Short Birks" field, Penmanshiel, March, 1874.

6. Horse-shoe shaped scraper, Plate iii., fig. 4. Considerably chipped round the semicircular edge. The body of the flint is very smooth and porcellanous, and quite white, having passed through fire. In the field next to Hog's Law, Oldecambus, which supplied previous examples, 1874.

7. Long horse-shoe shaped scraper, Plate iii., fig. 5. A miniature of No. 5. Minutely chipped round the edges, except the base. Of a pale grey flint. Probably used for polishing small objects. Field at Oldecambus, where the original post-road passed across, January, 1874.

8. Horse-shoe shaped scraper, Plate iii., fig. 8. This is one of the finest scrapers yet obtained. It is of a grey flint, mixed with a brown tinge, is thin, very smooth on both sides, and semi-transparent. It is very artistically brought to an edge, and has been little employed. In a field at Penmanshiel, March, 1874, that had not previously yielded any flint relics, lying next to the old Red Clues farm, now incorporated with Oldecambus Townhead. There were once cairns on the higher adjacent land. It was all under heather when my father reclaimed it. On the moor still remaining to the east, I once in crossing picked up half a fractured stone-bullet of the larger sort, such as might have been in practise for games. It was composed of greenstone. If the moors were burned over in these early ages, they would furnish a very smooth bowling field.

9. Small cutting or piercing instrument, Plate iv., fig. 5. This is of grey flint. It is finely chipped on one edge and round the wedge-shaped apex, and about a third down the back, with a truncate base. In the same field as the last.

10, 11. Plate iv., figs. 8 and 9. These curiously shaped scrapers have been formed of small nodules of flint convex in the centre, from which they have been chipped away all round. They are of the horse-shoe type, and are of a pale grey flint. They are allied to the minute disk-shaped scraper, figured "*Hist. Ber. Nat. Club*," Vol. vi., plate i., fig. 6, which I conjectured might have been employed in polishing bone-pins. Found in the same field as the above, on very dry ground, perhaps the site of an old hut-circle.

12. Plate iv., fig. 3. Perhaps a sort of boring tool, or hollow scraper. See Evans, fig. 226, 229. The edges have been chipped all round, and then blunted by constant wear. It is thin and slightly bent, and brownish grey coloured. It would polish delicate objects rubbed against it. Found near Crow's Cairn, Penmanshiel, 1874, where the disk-shaped scraper was picked up.

IV. KNIVES.

13. Plate ii., fig. 1. This is the remains of a semicircular knife, which, unfortunately, the finder destroyed, not being aware of what it was. It has been formed of a peculiar grey marble-like flint; indeed it is wonderful what variety exists in the flints thus picked up, when we consider what a rare commodity flint must have been in a wild age, among people so remote from any native supplies. This implement has been modelled at one or two blows, as smoothly as if it had been cut. On ground once occupied by cairns, next Harelawside march.

14. Plate ii., fig. 3. This has been an implement similar to the last. It is of a sandy grey flint. In the field with Nos. 8, 9, 10, and 11, January, 1874.

15, 16. Plate iii., figs. 6, 7. These are little better than splinters to which a cutting edge has been imparted by a few secondary chippings. They were found deep among a rusty soil on the farm of Oldcambus Townhead, near the site of a British camp above Akieside wood. It was in one of the tombs connected with this camp that the urn was found, described in the Club's "*Hist.*," Vol. iii., p. 105. They are of whitish grey flint, stained with the yellow rusty soil.

17. Curved flint knife, Plate ii., fig. 2. This is a very fine example. The flat face is entirely smooth, while the workmanship occurs on the convex surface. It would form an efficient skinning knife. The blunt end is chipped as if for holding by. It is a mixture of pale grey and dark flint. Found on newly taken in soil at "*Short Birks*," accompanying fragments of bones. Knowing there were some tumuli there, I examined, and was rewarded with this implement, March 14, 1872. This field also furnished the straight knife, No. 8 of last report.

18. Straight flint knife, Plate iv., fig. 1. It is a very pretty

example of what might be called the "pen-knife" of the period. The flint is partly yellowish grey and partly brownish. Figure 236 of Evans is a similar implement. In the field with Nos. 8, 9, 10, 11, and 14, March, 1874.

19. Broken straight knife, Plate iv., fig. 2. The apical portion is snapped off. The primary long chips have been neatly taken off. It has been a home-made example of the mineral called flinty slate, a Silurian production. It is a mixture of grey and red. On "the Chesters" camp at Penmanshiel, where the numerous stone bullets are found. Spring, 1873.

V. FLAKES.

20. Plate iii., fig. 1. This shapeless splinter of sandy grey flint was found on the site of one of the three cairns that once stood in a triangle on the march between Penmanshiel and Harelawside, which was at the same time the boundary between Cockburnspath and Coldingham parishes. This was the middle cairn, and was surrounded by a rude stone wall. None of these huge cairns yielded anything when removed, except St. David's, in which there was a cist and bones. Nos. 4 and 13, and the burnt earthen ring No. 12, of last report, were within this circuit.

21. Plate iv., fig. 5. Flint chip of blackish brown flint. Along with another fragment, from the area of one of the barrows, where the flint axe was obtained.

22. Plate iv., fig. 4. I found this near one of Canon Greenwell's diggings in May, 1873, when crossing Whiteside hill, on my way to the Club's Chatton meeting. It is the second example of the kind I have found there. It is burnt almost white, from having been placed among the incandescent bones within the grave. There is a group of camps in the Earl of Tankerville's woods at Fowberry, where the inmates of these tombs may have lived. I may record here that in the large Weetwood camp on the northern projection of this hill, two very fine greenstone stone bullets of the larger size were obtained by Mr. Ord, which ultimately passed into Mr. Tate's collection.

Additional List of Plants not recorded in the "Natural History of the Eastern Borders." By ANDREW BROTHERSTON, Kelso.

IN the following list, besides the aliens, there are several natives—fine acquisitions to the district;—and I am convinced that if members would work up the *critical* plants in their several localities, many more could be added. No one except those resident in any locality can adequately examine the critical plants in it; as many of them require to be had in various stages, and at different periods of the year, which cannot be done on an occasional visit. The genera and species most requiring examination are:—The Batrachian *Ranunculi*, of which we have many forms; *Fumaria*; *Viola*; *Polygala*; *Rubus fruticosus*; *Rosa*, especially *R. canina*, the varieties of which are *very little* known in this district, although we have several of them; *Callitriche*; *Hieracium*; *Arctium*; *Mentha*; *Atriplex*; *Salix*. The Eastern Borders are particularly rich in Willows. Besides those in this and in a former list, I have found several others not recorded for the district; but they are not yet satisfactorily determined, not being got in the different stages necessary. Amongst them I expect to have *S. triandra*, *decipiens*, *laurina*, more varieties of *nigricans* (one of them typical *cotinifolia*), and *ambigua*. This is a grand district for the Pondweeds, and they are far from being well known in it as yet. *Carex*, *Bromus* (*Serrafalcus*), and *Chara* (a very little known family); and perhaps a few others might also be profitably looked up.

RANUNCULUS FLORIBUNDUS, *Bab.* This form is not uncommon in this district, both in the Tweed and in ponds; it grows also in the pool at the Todcrags, near Yetholm, intermingled with *Sium inundatum*. There are others of the *peltatus* group, but it is difficult to name them, as they run into one another.

„ **TRICOPHYLLUS**, *Chaix.* Plentiful in the under pond at Spylaw, near Kelso.

FUMARIA PALLIDIFLORA, *Jord.* On the edge of a gravel-pit below Galashiels.

BARBAREA INTERMEDIA, *Boreau.* Hayfield at Berryhill (1872); introduced with the grass seeds.

MELILOTUS ARVENSIS, *Wallr.* Several places on Tweedside, and on cultivated ground about Kelso. I suspect this will be frequently overlooked as *officinalis*; the habit and general appearance being very much alike, especially up till about August

when *officinalis* usually dies off, but *arvensis* keeps throwing out in profusion its pretty racemes of light yellow flowers until killed by the frost. By examining either the flowers or pods they are easily distinguished. In *officinalis* the petals are equal in length, and the pods are compressed, reticulate, and hairy; while in *arvensis* the wings and standard are longer than the keel, the pods being rounded, transversely ribbed, obtuse and glabrous.

ASTROLOBIUM SCORPIOIDES, *D.C.* Tweedside, introduced with wool, and probably also with "canary seed," as I picked up a plant on a place where the cleanings of an aviary were sometimes thrown. (Native of Europe).

PYRUS RUPICOLA, *Syme.* Gaitheugh; when coming down the river side, in July last, along with Captain Norman, we saw several bushes on the rocky precipitous face of the ravine near the upper end. This is scarcely the typical plant; it has a leaning towards *Aria* in the number of veins in the leaves; but it has the obovate leaf and other characteristics of *rupicola*.

PIMPINELLA MAGNA, *L.* Very rare. I have only seen a solitary plant on a bank near Kelso.

SENECIO CANNABINÆFOLIUS, *Hook. and Arn.* Introduced with wool to the Gala. Native of Buenos Ayres.

ANTHEMIS TINCTORIA, *L.* The first that I saw of this casual in our district, was a specimen that I got from Mr. T. Henderson, who found it at Berwick, June, 1874. In September following Mr. J. Murray picked up a plant in a field at Wallace-Nick, near Kelso, to which in all probability it was introduced with grass seeds.

CREPIS TECTORUM, *L.* Roadside near Kelso. By whatever means this interesting plant was introduced (if not wild) it was not by wool, the habitat being out of reach of the river; but it might have come with grass seeds, like several others of the same family. I first found it in 1872, and as none of the descriptions of our British species would fit it, I submitted a specimen (not a good one) to Professor Babington. He thought it was "a form of the polymorphous *C. virens*." Being at the same place in August last, I procured some more specimens, in a better state for determination; and, still having doubts about it, sent examples to the Botanical Society of Edinburgh, where it was determined to be *C. tectorum*, *L.* (not *Sm.*) The scarious ribs of the fruit distinguish it from *virens*, which has smooth ribs.

„ *NICEENSIS*, *Balb.* Occasionally in pastures, to which it has been introduced with grass seeds. "Comes between *C. biennis* and *C. virens*, var. *agrestis*."—Dr. Boswell Syme.

SALIX UNDULATA, *Ehrh.* Peatrig bog, near Kelso.

SALIX FORBYANA, Sm. Appears to be scattered over the district—Makerstoun, Floors, Carham, near mouth of the Whiteadder, etc.

„ *FERRUGINEA*, Anders. Frequent. Roadside near Berryhill; Peatrig bog; Tweedside, near Kelso; side of "Smiddy burn," Ednam, etc.

„ *RUGOSA*, Leefe. Banks of the Tweed, Teviot, Eden, etc., frequent. There are also intermediate forms between this and the preceding.

Several forms between *S. viminalis* and *Smithiana* are to be found in the district, some of which are very near *stipularis*, Sm., others to *intricata*, Leefe. But in this section it is very difficult to get a plant to agree in every particular with the description. Mr. J. G. Baker, of the Royal Herbarium, Kew, who kindly gave me his opinion of all those that I had any doubts about, makes the following remark:—"You will find plants half-way between the varieties as often as the variety exact"—which is certainly the case.

„ *WEIGELIANA*, Willd. This variety of *phylicifolia* seems to be frequent and widely-spread over the district. Moorland roadside near Fairnington; Tweedside, near Gaitheugh; bank on roadside near Carham; sides of the Ettrick near Selkirk. There is also a specimen, leaves only (unnamed), in the Herbarium, Berwick Museum, from "Island in the Tweed below Newbigging."

„ *HIRTA*, "J. G. Baker." Primside bog. This is one of those intermediate forms that it is not easy to say which it belongs to. It is recorded in "Proceedings, 1872, as *cotinifolia* (and I think that is still the best name). Mr. Baker's remarks on this were:—"Pubescence of *hirta*, leaf of *cotinifolia* (these *nigricantes* run greatly into one another)"; but he did not give it a name. Writing afterwards about the same plant, he said, "*hirta* best name, but leaves do not match, individual plant drawn from."

Since writing the above I have had the following opinions on it:—1. "*Cotinifolia*,"—Dr. Syme. 2. "I shall call it var. *cotinifolia* in report. It is so by its capsules undoubtedly; though I recognise a trace of *hirta* in some respects."—Dr. Lees, Recorder for the "Bot. Loc. Rec. Club." 3. "Amongst which are many vars. of *nigricans* [alluding to Leefe's specimens in the Herbarium, Royal Botanic Garden, Edinburgh]. I am certainly rather inclined to consider it more akin to *S. cotinifolia*, chiefly from the shape of the leaves; there seem to be so many forms between *S. hirta* and *cotinifolia*, and yours does not precisely agree with any of those I have seen."—Mr. J. F. Duthie.

„ *FORSTERIANA*, Sm. Banks of the Tweed and roadsides near

Kelso; ditchside, Angryflat, Kelso. This, like others of the *nigricantes*, is very variable; no two plants that I have seen are alike in every respect; they differ both in habit and in the form and clothing of the leaves.

SALIX DAMASCENA, *Forbes*. Near Carham. Possibly the same as *S. Andersoniana* of "East Bor." (I have not examined it), they being nearly allied and having glabrous capsules. Besides, these two were not distinguished in "Eng. Fl.," the nomenclature of which was followed in "East Bor."

POTAMOGETON POLYGONIFOLIUS, var. *LINEARIS*, *Syme MS.* Plentiful in the old pond at Muserig. This is a most peculiar looking variety; many of the linear, submerged leaves are upwards of two feet in length. It was determined by Dr. Syme. He says, "The *Potamogeton* is one that up to this summer [written February, 1875] puzzled me. I had it first from Mr. A. G. More, from Galway, the year before last, and then supposed it to be *P. sparganifolius*, Laest., a narrow-leaved form; then Mr. More sent it from Killarney, and I thought it most like *P. variifolius*, Thor. But last summer, Mr. More got a friend of his (Mr. Barrington) to send me fine specimens from Killarney, in flower (all I had seen before were without flowers or fruit), and it turned out to be a variety of *P. polygonifolius*. I have not yet seen the fruit of it, and should much like to do so."

"It differs from both *P. sparganifolius* and *variifolius*, in having the stem *unbranched*, i.e., there are no side-shoots without flowers, and having nothing but submerged leaves; and the peduncles and flowers are quite similar to those of ordinary *P. polygonifolius*. The main stem creeps at the bottom of the water and sends up simple (or forked) stems—when the stem forks, each branch commonly produces floating leaves."

"*NITENS*, *Web.* This very rare species is abundant in the Tweed below Kelso. I have found it on both sides of the river. It is very likely to occur upwards also.

CAREX FILIFORMIS, *L.* Abundant in Lurgie Loch; and, to judge by the habit and leaves only, it is also plentiful in Primside bog, Roxburghshire, but of this I am not quite certain. Dr. F. Douglas—who, along with Dr. Clay and Mr. W. B. Boyd, discovered it in Learmouth bog, Northumberland, eight years ago, which is the only recorded station for this plant in the district* hitherto ("Proc.," Vol. v., p. 303)—could not find it on a subsequent visit, and he believes that it is now exterminated by drainage. The total disappearance of this and several other interesting bog plants from this district appears to me to be only a question of time. Last year (1874) *very few* of the Lurgie Loch plants threw up flowering stems, and I have never

* "Newham Bog, near Bamburgh."—Dr. G. R. Tate. "New Flora of Northumberland and Durham," p. 280.

seen those in Primside bog in flower at all. But perhaps it is a shy flowerer naturally, (?) not requiring that means of increase, as it is well provided for otherwise, by means of its stolons and creeping rootstock; although there are plants equal, and even better off, in that respect, that flower freely every year.

PHALARIS PARADOXA, *L.* Forest field, Kelso. Amongst the "excluded" in the "Stud. Fl.," and said to have been "only once found"; but it now appears to be turning up in various localities.

FESTUCA PSEUDO-MYURUS, *Soyer.* Near the mouth of the Gala. This should have been amongst the "wool" plants in last year's list, but somehow or other it was left out. It was much more plentiful than *F. ambigua*.

,, *HETEROPHYLLA*. Pastures and roadsides about Kelso; introduced with farm seeds.

BROMUS ERECTUS, *Huds.* Banks of the Tweed below Hendersyde Park. As this plant is in both the "Flora of Edinburgh," and the "New Flora of Northumberland and Durham," it was very likely to turn up on the Borders. It was growing on a part of the banks that was usually eaten by cattle, but allowed to grow last year, otherwise it might have escaped notice.

,, *TECTORUM*, *L.* Tweedside below Kelso.

CERATOCHLOA UNIOLOIDES, *D.C.* Do., and near mouth of the Gala. This and the preceding introduced with wool.

CHARA FRAGILIS, *Desv.* Muserig Pond along with *C. fetida*, Braun.

Arabis Turrita discovered at Haining. By A. H.
BORTHWICK.

IT has been my good fortune within the last few weeks to discover another station for that rare plant *Arabis Turrita*. The only other place hitherto given up for it in Scotland has been Cleish Castle. On the 17th day of April last, when walking through the policy and grounds of the Haining, I found a cruciferous plant growing on the top and sides of an old crumbling wall, and having every appearance of being indigenous. On examination, I pronounced it to be, as I have said before, *Arabis Turrita*. Again, on the 5th May, I re-visited the spot for the purpose of getting fresh specimens; it was then in fruit, and pods of considerable length were beginning to diverge and come downwards.

Melrose, 19th May, 1874.

*On Ancient Stone Cists and Human Remains discovered
at Aycliffe House, near Ayton.*

IN the second week of November, 1873, while some workmen were employed in laying out and levelling the grounds adjacent to Aycliffe House (a new mansion on the site of what was formerly Millbank), situated about four hundred yards above the junction of the river Eye with the Ale, on the estate of Alexander Mitchell Innes, Esq., of Ayton Castle, they discovered a number of stone-coffins or cists containing skeletons, evidently those of ancient Britons of a very early age.

The cists were arranged parallel to each other, in a north and south direction, in two rows, and were found at a depth of from 15 inches to 4 feet, and from 4 to 6 feet apart. There were no cairns or barrows. The graves had not been formed, as is usual, on level ground, but on a steep bank facing the south, which slopes to the river Eye. The bank there slopes to the river at an angle of about 30° ; and these graves formed two lines or rows—oblique to the slope of the bank. This was so steep that the grave at the east or lower extremity of one of the rows, was about eight feet below the level of the graves at the other or upper end. The stones forming the sides, ends, and tops of the graves were of the rudest description. They were flat stones of greywacke, or greywacke slate, such as might have been obtained from the channel of the river, which runs at the foot of the bank. There was one stone at the foot, and another at the head, with three or four stones on the top. But the stones did not fit closely to one another, in consequence of which the graves, when opened, were much filled with earth, and the bones much separated. In one case, apparently, the bones had been disturbed, as if some one had searched the graves. Towards the upper slope of the banks the graves became more closely packed together, and seemed to have been placed in their position without any fixed order, as some of the skeletons lay with their heads to the north, others with their heads to the south. When Mr. Milne Home visited the place, only eight graves had been laid bare, but subsequently twelve was the number disinterred. In seven of those graves the skull was at the south end; in the eighth the skull was at the north end. The row consisting of eight occupied a space about ten yards long by two yards wide.

The length of the graves (inside measure) was about 4 feet, the width 20 inches, the depth 15 inches. The skeletons were found doubled up in a recumbent position, sideways, their heads resting between their knees. They were more or less decayed, and the skull of only one was fit to preserve. The bones of it were intact, with the exception of the temporal. The upper jaw-bones were in a good state of preservation, but only contained three of the teeth. The under-jaw was quite good, and contained all the teeth in very fair condition. Four of the double teeth were very large. The skull measured 20 inches round, a little above the occiput. The height from the chin to the top of the brow indicated a long face. The skull was somewhat narrow in front, but widened considerably towards the back. The size of the skull, of the teeth, and of the bones, induced the belief that the persons interred were middle-aged. From the position of the graves, and the appearance of the contents, it was inferred that they had been all formed at the same time—probably after a battle. In the last grave uncovered, an urn appeared, placed bottom upwards. This grave did not differ in construction from the rest. It contained no skeleton, but only a little dark earth. The vase-shaped urn was very rude and simple, and made of red fire-clay. It is in the possession of Mr. Mitchell Innes, who has communicated a sketch of it (Plate v.), along with its dimensions. It is 6 inches high externally, 5 inches deep in the interior; breadth across the mouth, $6\frac{1}{2}$ inches; broadest interior part, 5 inches; breadth of the ornamental bossed ring, 7 inches. There are no ornaments, other than three bosses, across this band, and no handles, nor were the bosses perforated.

This account is drawn up from a variety of statements from different correspondents, compared with paragraphs in the "Scotsman," "Courant," and the local papers.

JAMES HARDY.

POTAMOGETON NITENS. This I gathered in the Teviot in front of Ormiston House, and I do not think it has been previously noticed in our district.—W. B. BOYD.

„ **HETEROPHYLLUS.** This grows plentifully in Cauldshiels Loch.—IBID.

CHENOPodium BOTRYS. This native of the south of Europe has occurred as a straggler near Cherrytrees.—J. B. BOYD.

On a Bronze Celt found at Linden. By R. G. BOLAM,
Weetwood Hall, Belford.

I SEND you herewith a sketch of an old bronze "Celt," which was found in cutting a drain across a bog upon the Linden estate, near Morpeth, and is now in the possession of the proprietor, Mr. Ames. Its measurements are:—Length from A to C, $5\frac{1}{4}$ inches; width at A, $1\frac{3}{4}$ inches; width at B, 1 inch; width at C, $\frac{7}{8}$ ths of an inch; thickness at D, $\frac{3}{8}$ th of an inch; weight, 8 ounces. A drawing of a similar implement is given in the "Pictorial History of Scotland" (Virtue & Co.) as belonging to the bronze period; but in this there is a bar across the neck and a hole at the upper end, as if to attach a handle by a wooden pin. These are not in the specimen found at Linden, which seems a larger and stronger implement, and, judging from the marks, to have been attached to the handle by strings or thongs.

*Note of the Arrival of some Migratory Birds at Belford,
Bowmont Water, in 1873-4.* By Dr. ROBSON SCOTT.

1873.

April 20. *Sylvia trochilus* (Willow Wren); observed several days before singing. *Hirundo urbica* (House Martin); disappeared, after staying a few days, and did not return till 6th May.

May 7. *Hirundo riparia* and *H. rustica*. *Tringa vulgaris* (Sand Piper). Cuckoo.

May 12. *Sylvia cinerea* (Whitethroat).

May 20. Swift (*Hirundo apus*).

1874.

April 22. Chimney Swallow (*Hirundo rustica*). Sand Martin (*H. riparia*).

April 23. House Martin (*H. urbica*).

April 29. Cuckoo.

May 9. Willow Wren. Did not sing until 13th.

May 18. Whitethroat.

May 20. Swift.

Arrival, Departure, and Local Movements of Birds, near Oldcambus, 1874. By JAMES HARDY.

- Jan. 14. A pair of Stone-chats seen on the coast. Only a few remain here all the winter, and occasionally all depart. Mallards less numerous in the sea. Thrushes continue among turnips, and in search of snails by wall-sides.
- Jan. 19. Lapwings very numerous in grass-fields, having come up from the lower part of the parish.
- Jan. 20. Fieldfares numerous as the frost was breaking up. Only a few Herons, Redshanks, and Curlews at the sea-side. The Curlews and Herons alternate between the country inland and the shores, their numbers being inconstant.
- Jan. 28. Starling whistling.
- Jan. 30. Missel-thrush in song.
- Feb. 1. Lapwings still present on the leas.
- Feb. 2. Larks attempting to sing. Ducks at sea, very few. Partridges calling at evening.
- Feb. 4. Curlews very noisy at sea-side; some uttering their summer notes.
- Feb. 5. Flock of Wild Geese passing northwards.
- Feb. 6. Yellow-hammer attempting to sing. Redbreast in song. Two male and six female Eider Ducks off the coast, diving along the Laminarian zone. When any one walks along the coast, they keep in line with him. They utter a noise like the cooing of a pigeon. The fishermen call them "Cud-does," *i.e.*, St. Cuthbert's doves, perhaps from the note and the pure conspicuous white of the male bird. They stay all the winter, but are very seldom seen off here, and are said to breed on some of the rocks near Fastcastle. In earlier times, they also nested on a rough part of the bank near the Cove harbour. Linnets singing. Curlews uttering summer notes; fourteen on the shore. Stone-chat has deserted its winter station beside an open marsh at the sea-side. No Snow-buntings visible for some time.
- Feb. 11. After snow-blasts, Snow-buntings again appeared.
- Feb. 12. Partridges paired. One Lapwing seen.
- Feb. 14. Three Lapwings seen. About twenty-seven Mallards at sea. Large flock of Snow-buntings, as also on February 17. Only one Heron. Wood-pigeon cooing.
- Feb. 16. Hedge-sparrow singing.
- Feb. 18. Ten Cormorants at Siccar. Only three Ducks; these begin to scatter inland, ascending the burns. Chaffinch singing.
- Feb. 19. No Lapwings on the leas. Five Black-headed Gulls fishing among the tangle. They were heard a few days previously. They only visit here in passing.
- Feb. 23. One Lapwing calling on an upland field. These birds returned to the moors at Penmanshiel to-day.

278 *Arrival, Departure, &c., of Birds*, by Mr. Jas. Hardy.

- Feb. 24. Only three Ducks at sea, and one Heron. Herons were scarce this winter, the burns and ponds being open. Lesser Black-backed Gull seen off Siccar.
- Feb. 25. Four Eider Ducks in pairs. Five Herons at shore, being frosty inland. Twenty-four or twenty-five Curlews. Fourteen Wild Ducks. The numbers show how the assemblages vary. A male Stone-chat came to the dean, and became resident.
- March 1. Curlews in the turnip-fields. Lapwings in their lower breeding haunts, and calling by moonlight.
- March 6. No Mallards. Snow-buntings heard. Curlews visited the moors at Penmanshiel to-day.
- March 7. Several young grey Gulls with the old at sea.
- March 9. Several Moor-pipets in the sheep-fold.
- March 10. Snow. Twelve Lapwings driven down to the sheep-fold. Fieldfares also at the fold.
- March 11. Snow-buntings visible. Stone-chat remains in the dean.
- March 13. Five Lapwings at the fold. Mallards at sea-coast broken into parties of three, nine, five, and five respectively; the gregarious ties becoming loosened. Only seven Curlews at Coast, and one Heron.
- March 14. One Black-headed Gull seen.
- March 17. Only one Mallard at sea.
- March 20. Snow-buntings at sea-banks. Great numbers of Curlews in the bogs at Drakemire, which lies on the Dunse road at Bunkle Edge.
- March 21. Seven Curlews at the shore. Only one Cormorant. Gulls become clamorous if one looks over the bank at them resting or swimming about. One Grey Wagtail, the first, at a small stream. Seven Eider Ducks, four males and three females.
- March 22. Common Humble-bee abroad, and Nettle Butterfly, or "Witch." Blackbird attempting to whistle. Pied Wagtail heard.
- March 23. Redshanks were numerous on 21st; but only three are visible to-day along a considerable line of coast. Twelve Curlews still there, and nine Wild Ducks, widely dispersed, the bands having broken up. One Pied Wagtail seen at the sea-side. Jackdaws building. Fifteen Lapwings in a flock passing northwards. One Heron only. No Cormorants visible, except one fishing at sea. They left early this year, a storm on the 19th March having scattered them; they never reassembled. They are accustomed to leave for days when the rough sea dashes over the favourite resorts, where they rest, sleep, and preen their plumage. Peregrine Falcon visited the sea-banks.

March 24. Six or seven Curlews remain ; and a pair of Redshanks. Four Wild Geese pairing ; one Fieldfare.

March 25. A number of Kittiwakes associated in a party with Common Gulls on the Pease Sands. Five or six Redshanks again to-day ; eight or nine Gulls, two Ducks, and two Herons.

March 26. Several Curlews ; a pair of Redshanks ; one Pied Wagtail ; four Mallards. A pair of Lapwings passing northwards.

March 27. Six Curlews ; no Mallards. Two Grey-backed Crows passing northwards.

March 30. One Redshank on the shore. Several Moor-pipets following the plough. Water-Hen returned to the pools in the dean.

April 4. A pair of Stone-chats took up their abode in the dean and bred there among whin-bushes. No Pied Wagtails.

April 5. Several Grey Wagtails, all new arrivals, seen at many different points along the coast.

April 6. Eight Curlews and five Herons. No Redshanks nor Mallards. One Pied Wagtail. One Gannet fishing off the coast, the first.

April 7. Pipets and Curlews are now settled on the high moors. Snipe humming in the air. One Ring Ouzel on the heights near Dowlaw. It did not visit the dean this season during its transition to the uplands. Wheat-ears arrived on the sea-banks near Redheugh, after mid-day. They were not there in the morning. Five Wild Geese passed.

April 8. Wheat-ears have attained a mile farther north than yesterday. A pair of Stone-chats on the coast, but did not remain.

April 11. Only one Curlew and one Heron. One Wheat-ear only left.

April 13. Six Herons and four Curlews ; and a single Cormorant, fishing at sea, which was still there on the 18th and 20th ; no Wheat-ears, Wagtails, nor Stone-chats.

April 18. A few Wheat-ears.

April 21. Wasp abroad. Three Herons and two Curlews. Willow Warbler (*Sylvia Trochilus*) arrived ; singing at intervals. Some fresh Wheat-ears on the sea-banks ; they appear to arrive in straggling parties, which are guided by the coast. In the afternoon, at four o'clock, observed six Martins (*Hirundo urbica*) making northwards, not in a body but in a scattered train ; first two, then two, then one, which was followed by the sixth—and these at intervals of ten minutes ; pursuing the sheltered windings of the dean, in the face of a sharp wind. Blue Tit pairing.

April 22. More Wheat-ears in little parties of ten or thereabouts. One Swallow (*Hirundo rustica*) arrived. One Martin and one

Sand Martin following the outline of the sea-banks and going to the north. No Curlews seen. Water-Hen has four eggs Copper Butterfly out.

April 23. Blackcap (*Curruca atricapilla*) arrived at Pease Bridge; singing and very active. Starlings building in the wood below the Bridge, and also in the sea-rocks at Siccarr. Chiffchaff (*Sylvia rufa*) in the Pease dean; a bird never observed before in this vicinity. It frequented the young tall larches. It twice descended from the trees to the burn, and took a drink, and then mischievously gave chase to the Willow Warbler and the Gold-Crest, and a companion of its own species. The Willow Warblers are numerous in song. Two Herons and two Curlews at the coast.

April 24. Wood Warbler (*Sylvia sylvicola*) heard in Pease dean. More Blackcaps. Chiffchaff again heard. Two Swallows now present.

April 25. Four Swallows present, the complete number. Two Mallards at sea. No Curlews. Three Lapwings passing southwards; perhaps they had got no mates in the north. Grey Linnets still in flocks at groundsel.

April 27. Nine or ten Fieldfares near the coast, perhaps waiting for their departure; not seen again. No Curlews, Wheat-ears, or Herons on the shores.

April 30. Corn-bunting arrived.

May 1. White-throat arrived. Wheat-ear again seen. Cuckoo seen; had arrived on the 29th April. Lapwings have young.

May 2. Wood Warbler more abundant in Pease dean. I thought I heard the Redstart's note at Pease Bridge, but the male being a shy bird, I could not get near it. It did not visit Oldcambus dean this season; but I observed a party of young and old, June 28, at the Pease Bridge. I never saw it there before this season. Large flocks of Wood-pigeons in the fields, at seeds of *Veronica hederifolia*, among young wheat. No Sand-piper yet in the burns. Whitethroat well spread. During the week a party of five Sand Martins was observed on the North British Railway, hastening past in a body northwards, not leaving their track. Young Thrush full feathered.

May 9. Tree-pipet on tall trees at Cockburnspath. No Swifts or Martins as yet settled in the neighbourhood.

June 15. Some Stone-chats have had nests on the coast at foot of Pease burn. No Curlews as yet on the shores.

June 19. Lapwings have deserted the moors and now frequent in a flock the turnip-fields. Three Curlews at evening, making from the coast to the upland moors.

July 10. Lapwings still among turnips. Curlews in large numbers at the sea-coast; a small party of Redshanks also, but no Herons or Cormorants. Black-headed Gulls began to arrive.

July 15. Three Herons on the coast.

July 24. First Cormorant at the "Scart Rock," near Siccar.
Curlews are scattered and few along the shores. Young Raven appeared at Siccar.

Aug. 4. Four Herons at the coast; three young Ravens at Siccar, supposed to have come from the vicinity of St. Abb's Head.

Aug. 5. Nine Herons and five Cormorants arrived. Few Curlews. Some young Wheat-ears. Many Black-headed Gulls.

Sept. 2. Cormorants augmented to twelve. No summer birds heard or seen in the Pease dean: one Whitethroat was alone visible; and again on the 3rd, but not subsequently.

Sept. 10. Lapwings associated with Starlings on the leas.

Oct. 9. Swallows left.

Oct. 12. Fieldfares returned.

Oct. 15. Large numbers of Thrushes among whins on the borders of the dean. All the Stone-chats had left the coast before this.

Oct. 16. Large flock, about one hundred, of Mallards arrived on the sea-coast, where they remained, gradually diminishing in numbers during the winter. At night they betook themselves to inland ponds, and perhaps the fields. Their favourite winter resort is exactly opposite this. Twenty-three Cormorants at Siccar. I noticed that these assemblages betoken bad weather; next day it rained.

Oct. 19. One Grey-backed Crow arrived; many Jackdaws assembled to try the qualities of the new-comer, and a Carrion Crow also tried to force its friendship on it. It remained a few days. The Grey-backed Crows are less numerous hereabouts now than formerly.

Oct. 21. Lapwings in numbers on the lower fields. A few Herons dispersed along the shores. Last Pied Wagtail seen.

Oct. 23. The last *Bombus lapidarius* seen. Three Woodcocks on Aikieside hill, just arrived.

Oct. 26. Sixteen Cormorants at Siccar.

Nov. 3. First Snow-bunting arrived.

Nov. 8. Sea calm. Twenty-six or twenty-seven Cormorants on one rock at Siccar. Wild Ducks very numerous. Flock of Snow-buntings on newly-sown wheat field beside the sea-banks.

Nov. 9. High wind, with showers of hail; only four Cormorants remained; a cold, stormy week followed. Three Eider Ducks, two males and one female, off Siccar.

Nov. 14. Large flock of Fieldfares. No Cormorants. Curlews scarce on the shore this autumn, mostly frequenting turnip fields on the low lands.

Nov. 21. About thirty Wild Geese passed for the first time. Great flocks of Wood-pigeons began to arrive in the woods at Penmanshiel three days ago. Lapwings among turnip fields by moonlight.

- Nov. 22. The flocks of Wood-pigeons began to arrive in the Pease dean. They betook themselves to the clover fields during the day.
- Nov. 23. Eight Eider Ducks at Siccar; sexes equal. A savage fight between two males, sousing each other, and plashing up the water. Great flocks of Larks. Lapwings heard at evening.
- Nov. 27. The flocks of Wood-pigeons reached this; frequenting the clover fields. They were equally numerous on the 28th, till some of the gamekeepers began firing among them, when they left.
- Dec. 1. Starlings in numerous bands on the leas among sheep; and other companies were noted elsewhere. They were never seen hereabouts before in such assemblages.
- Dec. 2. Fieldfares and Snow-buntings in flock. Wild Ducks become less numerous on the coast after this date. A single Golden Plover heard at evening.
- Dec. 6. A Grey Wagtail seen near Pease Bridge. Immense flocks of Starlings in pasture fields.
- Dec. 11. The great snow-storm had begun, [but there was less snow here than most of places. Redshanks came up from the sea to open springs and pools, and a Snipe or two frequented them till the snow left.
- Dec. 12. Razor-bill (*Alca Torda*) driven ashore; and I heard of a Guillemot (*Uria Troile*) about the same time, proving that they are still off the coast. No Mallards at sea.
- Dec. 14. Twelve Lapwings at turnip field. Fieldfares scattered over fields; no Cormorants.
- Dec. 15. Woodcock at open pools and streams along the coast. Plover heard in sea-side fields. A pair of Stone-chats among the sheep in fold, on the moor at Penmanshiel.
- Dec. 17. More snow. Great flocks of Larks. Fieldfare frequents the sheep-fold.
- Dec. 18. Kittiwake driven ashore, a two-year's-old bird in winter dress. Plovers on sea-side fields.
- Dec. 19. About thirty Mallards, three Herons, and three Cormorants at sea. Many Fieldfares, Redwings, and Missel Thrushes continued for several days after this to frequent the sea-banks at Siccar, where these were exposed to the melting influence of the sun's forenoon rays; working with all their might in digging at the softened clay, and in turning up old sheep dung, to procure insect food. One male Stone-chat attended them, as well as several Sea-pipets. The Pigeons of the sea-caverns betook themselves in a body to the stackyards, and attacked the stack sides.
- Dec. 21. Kittiwake seen passing on the sea-banks.
- Dec. 22. A detachment of Starlings resorted to the stackyard and soon made themselves at home, feeding among the domestic

fowl, and passing into the cattle sheds. They continued their visits daily till the black ground re-appeared. Lapwings scattered themselves among the open runnels, or passed down to the sea-shore. The Golden Plovers also betook themselves to search for food among the tide-covered rocks.

Dec. 23. Kestrel Hawk seen. Large flocks of Larks mingled with Snow-buntings on melted patches of clover-lea near the sea-coast. Both Larks and Snow-buntings frequented the stackyard till the end of the month. Mountain Finches were frequently heard, and there were several at corn-stacks.

Dec. 25. A piece of new ground on a bank was turned up within these few days, and brought together nearly all the Thrush kind, except Blackbirds, for worms and insects. They almost followed the men's progress in that and some other levelling operations. The Missel Thrushes were very quarrelsome, and attacked not only each other but also the Fieldfares; and the Fieldfares flew at each other. Song Thrushes mixed through among the others, and there were a few Redwings, which are very shy birds. There were also a few Moor-pipets, and three Stone-chats (two females and one male) at the feast; several Robins, a Mountain Finch, and a number of Chaffinches, as well as some Rooks. A Bullfinch was noticed, but I did not observe it.

Dec. 28. Starlings fewer, as well as the thrush kind. Some may have shifted place, but several died of hunger and cold; and of such I noted afterwards among the fallen, although they were not numerous, Missel Thrushes, Song Thrushes, Fieldfares, Golden Plovers, and Lapwings. Three or four Gold-crests frequented the furze bushes for food; and the Blue and Cole Tit were active there also. The Blackbird appeared to find food there without shifting place.

Dec. 31. Mountain Finches sore distressed. Fieldfares few. Redwings have disappeared, the sea-banks having become iced over. Only four Wild Ducks at sea, and no Cormorants. A small flock of Wild Geese in the morning.

Notices of Arrival of Birds, &c., at Weetwood Hall.
By R. G. BOLAM.

	1873.	1874.
Sand Martins	April 17th.*	April 15th.
Cuckoo	May 5th.	26th.
Wheat Ear.....		7th.
Sand Pipers		20th.
Redstart		25th.
Corn Crake heard		28th.
Hawthorn in blossom	May 27th.	27th.†

* The Sand Martins appeared 17th April, 1873, but cold weather coming, they left again and did not reappear for some time afterwards.

† This is the earliest day I ever remember to have seen and pulled hawthorn in bloom in this district.

Zoological Notes. By JOHN FERGUSON.

MOTHS.

- NOTODONTA DICTÆA. Swallow prominent. Reared from chrysalis got in Easter bogs, Dunse.—*D. and T. Stevenson.*
- CIRRHÆDIA XERAMPELINA. Centre-barred Sallow. Whiteadder near Cockburn Law.—*T. Stevenson.*
- PLUSIA INTERROGATIONIS. Scarce Silver. Greenlaw Moor.—*A. Cunningham.*
- CYMATOPHORA DUPLARIS. Lesser Satin. Whitelaw, near Cockburnlaw.—*A. Cunningham.*
- SCODIONA BELGIARIA. Gray Scolloped Bar. Greenlaw Moor.—*D. Paterson.*

BUTTERFLIES.

- CÆNONYMPHA DAVUS. Marsh Ringlet. Greenlaw Moor.—*A. Cunningham.*
- LYCÆNA ARTAXERXES. Scotch Brown Argus. Cockburn Law.—*A. Cunningham.*

BIRDS.

- FALCO SUBBUTEO. Hobby. Two specimens of this Falcon have been shot in this neighbourhood during 1874. One was got at Kimmerghame, but I have not ascertained where the other was shot.
- REGULUS IGNICAPILLUS. Fire-crested Wren. Some summers ago I saw a specimen of this pretty little bird in a fir wood near Gavinton. It was in company with several Gold-crested Wrens, but could be readily distinguished from them by its bright flame-coloured crest. I have often looked for it since in the same locality, but have never met with it again. In habits and general appearance it bears a great resemblance to the commoner species.
- BOMBYCILLA GARRULA. Bohemian Waxwing. One specimen was seen and shot on Dunse Castle estate in the winter of 1873.
- LINOTA LINARIA. Lesser Redpole. A number of these birds were seen in the low grounds near Allanton during the late severe storm, which appeared to have driven them from their usual haunts in search of food. One was caught by my cat in a plantation behind the village. It was in plump condition, and as it was a good specimen I got it stuffed.

As in former years, several Goosanders and Water Rails have been captured in reedy ditches and pools in the Merse, and on the moors stretching between Greenlaw and West-ruther. I have also been told that two specimens of the Greater Butcher Bird, or Shrike (*Lanius excubitor*), were seen near Dunse during the recent storm.

Zoological Notes, 1874. By ANDREW BROTHERSTON, Kelso.

WOODCOCK (*Scolopax rusticola*), Pen. -- One got near Kelso on April 4th, 1874. From the lateness of the season, it is not unlikely that it might have bred in the district. In the beginning of March, 1875, I had an example from Dunsdale, Cheviot.

ONE REASON WHY THE KINGFISHER IS NOT MORE COMMON. —One of the chief causes of the comparative scarcity of the Kingfisher, is, I believe, occasioned by a sudden rise of the rivers during the breeding season. In the beginning of April, 1874, the Tweed rose to nine feet during the night. Now, most (indeed, all that I have seen) of their nests are placed nearer the level of the water than that; and as it is an early breeder (I knew an instance in which the eggs were taken the *second* time from the same pair of birds, on the 10th of April), many of them would in all probability be drowned; more especially as the hole in which the nest (?) is placed slopes upwards, so that the entrance might be closed by the rising water some time ere it could reach the bird. For some years prior to 1874, there had been no great rise of the rivers during the breeding season: consequently, the Kingfishers increased greatly, at least, in this district; but this year so far as my own observation extends, and from what I can learn from others—who are in the way to know—they are much scarcer. A severe winter is frequently blamed for this, but it is not applicable in the present case, as the winter of 1873–4 was unusually mild. A hard winter does not seem to hurt the Kingfisher. I had two at the beginning of the late storm, and one at the end of it (on New Year's Day); the last killed was in as good condition as the others, being equally fat, and had the remains of numerous small fish in its stomach.

HOW THE SWIFT REGAINS POSSESSION OF ITS OLD NEST. —Owing to the great increase in the numbers of most of our smaller birds during recent years—more particularly Starlings and Sparrows, which nest in holes—the old nests of the Swift are usually occupied when they arrive. Knowing that they could not remove the Sparrows by force, they *frighten* them out in the following manner. A number of them fly together in Indian file, circling round and round, uttering their harsh discordant screams every time they pass the entrance to the hole they wish to regain possession

of, until the frightened inmate slips out, when the nest is immediately taken possession of by the Swift.

EGYPTIAN GOOSE (*Anser Egyptianus*), Jenyns.—Three of these beautiful birds—a male and two females—were shot out of a flock of seven on Yetholm Loch, May 22nd, 1874. In addition to the two shot, several years since, on the Tweed, at Floors, by his Grace the Duke of Roxburghe, Mr. W. Stevenson shot a pair at Carham about 34 years ago.

TURTLE DOVE (*Columba Turtur*), L.—The Turtle seems to be extending its northward range, in the breeding season. There was a fine female shot at Clifton Park, Roxburghshire, on the 28th of May, 1874. The most forward ova were larger than a pea, so that in all probability it would have nested in the neighbourhood. A week later (June 3rd), a male was shot at Kilham, Northumberland. As the two places are only a few miles asunder, it is not unlikely to have been the mate of the one shot at Clifton Park. Have they been known to breed in Scotland? On the 19th of November following, a young male was shot in a stubble field, about a mile from the mouth of the Whiteadder, near Berwick. This is the latest that I have seen any record of—it is nearly a month later than the one that was got near the same place on October 20th, 1872.

TEAL (*Anas crecca*), Pen.—I found a nest with four eggs on Primside bog, on June 9th, 1874. The nest was thickly lined with down. It was placed on a dry, slightly elevated spot, and quite open, although there was plenty of shelter near. Unlike the common Wild Duck when disturbed from the nest, she did not pretend lameness, but flew right off. The eggs were of a uniform creamy-white colour, without spots. Fleming says “reddish white with brown spots.”

BLACK WATER VOLE (*Arvicola ater*).—Macg., “Trans. Wern. Soc.,” vi., p. 424. “Var. Possibly a distinct species.”—Bell’s “Brit. Quad.”—Mr. Hugh Paterson caught an adult female in a mole-trap, on Sharpitlaw Anna, in August last. The chief difference that I could observe between this and the common Water Vole, besides the colour, which was a deep black, rather lighter below, was its smaller size; length of head and body, $6\frac{3}{4}$ inches; tail, 3 inches. According to Macgillivray it is common in the counties of Banff and Aberdeen; and Jenyns states that “the black variety is not uncommon in the fens of Cambridgeshire, and differs in no respect from the other but in colour;” while Macgillivray

"believes that there exist sufficient differences in the organisation and colour of the two to constitute them distinct species." Mr. Bell does not appear to have seen fresh specimens, only a stuffed one belonging to Mr. Yarrell. Since writing this notice, I have seen Mr. Cockburn, Westwood Cottage, which is close on Sharpitlaw Anna, and learned from him that he had frequently seen Black Water Rats about the dam and the Anna. The first time he observed one was upwards of twenty years ago, when there was one caught in a mole-trap in Hendersyde Park garden, which is four or five hundred yards from the river. He had noticed the *inferior* size of the black variety to the common.

WHIMBREL (*Numenius phaeopus*), Pen.—A fine male specimen of this miniature Curlew was shot in the neighbourhood of Lambden, near Greenlaw, in the beginning of September. This is a rare bird with us, but it appears to be not uncommon in some parts of the country.

BUZZARD (*Buteo vulgaris*), Flem.—Some of the larger birds of prey are still occasionally to be met with in this country. But, excepting the Peregrine, I am not aware of any of them having bred recently in this district; so that we may only consider them as stragglers with us. About the middle of September, 1874, I saw a large bird alight on a tree in a plantation near Proctor's Smithy, about two miles south-east from Kelso. Wishing to ascertain which of our large hawks it was, I went to see, and got under the tree upon which it was perched before it rose; when I had no doubt of its being the common Buzzard. I could see the bars and markings of the wings and tail against the clear sky, as distinctly as if held in the hand. It is a striking bird when seen on the wing, especially as I saw this one. When it rose from the tree, it soared spirally upwards, scarcely moving its wings until nearly out of sight. A short time after I left the place I saw it descend and land near where it arose from. About an hour afterwards I saw another sailing, about three feet from the ground, along the outskirts of a narrow plantation, near Spylaw. As it passed within 30 yards, I saw that it was of the same species, but a larger and darker-coloured bird. They remained in the neighbourhood for several weeks, having been seen by various people, at different places.—It seems to me that game-preservers, generally (there are now, I believe, some few exceptions), "sit in their own light" in their wholesale

destruction of the rapacious birds. Besides the noxious vermin they destroy, it is believed by most of those who have *paid attention* to the subject, that a certain proportion of birds of prey is absolutely necessary to keep game in a healthy condition. No doubt some of them kill game at times, but it is the weakly and unhealthy birds, the stronger and more vigilant escaping; hence their offspring has a better chance to be strong and healthy, than if the weakly birds were allowed to live.

RICHARDSON'S SKUA (*Lestris Richardsonii*), Jenyns.—A mature male was shot by Mr. Cotesworth, November 12th, 1874, on the farm of Whitefield, near Cowdenknowes; a long way inland for this rapacious sea-bird to be found. There was only one bird seen.

PARASITIC WORMS IN LEG OF GREBE.—When skinning a Little Grebe (*Podiceps minor*, Pen.), on November 25th, 1874, I came upon a cluster of Nematoid Worms amongst the muscles and tendons of both legs—exactly in the same place in each—near the lower part of the tibia. From their larger size they appeared to have been longer in the left leg than in the right. They were rather hard and stiff—not soft and flabby—of a *regular* spiral form, of about six turns, tapering to each end, the largest about three-quarters of an inch in length—not following the turns of the spiral; if straight they would be about an inch long. They seemed unable to straighten themselves; when found they were twined together like the strands of a rope, and I observed that one after being separated from the others bent *slowly* round until it was twisted on itself. The bird was very much emaciated, and no wonder, as in addition to the worms in the legs, it had a large fibrous tumour in the back.

BITTERN (*Botaurus stellaris*), Selby.—On the 10th of December, 1874, an adult male of this fine bird was shot on the farm of Northfield, near Lowick, Northumberland, by Mr. J. Waters. It was in extreme length (bill to feet), 3 feet 3½ inches; from bill to tail, 2 feet 5 inches; expanse of wings, 3 feet 10 inches. It had the remains of several Field Voles (*Arvicola agrestis*, Flem.) in the stomach. During the winter of 1874–5, there have been numerous specimens of this bird got in England, but I have not heard of any having been obtained north of the Border. “The back claw,” says Willoughby, “which is remarkably thick and long above the rest, is wont to be set in silver for a pick-

tooth, and is thought to have a singular property of preserving the teeth."

"MOONIE."—I have no doubt that "the Moonie, a small bird which I could not identify," mentioned in "Our Visit to Holy Island in 1854," by Dr. Johnston ("Proc.," 1873, p. 43), is the Goldcrest (*Regulus cristatus*, Flem.) As long back as I can remember, the "Moon" has been the local name for the Goldcrest, and still is amongst schoolboys in this district (Kelso and Ednam). Another local name mentioned by Dr. Johnston, which shows a common origin, is that of the Sand Martin; at Holy Island it is "Butterie," here it is "Bitterie" and "Bitterbank."

GOLDFINCH.—Mr. James Jack, at East Mains, Lauder, in December, 1874, saw eighteen of these now rare birds in our district, in one flock; and at various times during the winter small flocks of three, four, and five; and towards the end of February, 1875, he saw thirteen at one time. I only know of one pair in this neighbourhood for several years past; they were seen on Tweedside, below Rosebank toll, feeding on the seeds of *Centaurea nigra*.

Miscellanea; Extracts from Correspondence, &c.

By JAMES HARDY.

FINDING, among my correspondence, some particulars calculated to promote the objects of the Club, I place them at its service under this heading. I received them in consequence of some inquiries about local Natural History, and the writers intended that I should make use of them. I shall be glad to have similar notices from any of the Club's members, who may not be disposed to write elaborate papers, but may have some observations which they wish to be preserved. To the offerings of my old friends, only one of whom now remains, I subjoin a few other incidents of the past season.

I. ZOOLOGICAL.

FOOD, &C., OF THE HEDGEHOG.—The late Mr. Henderson, surgeon, Chirnside, sent the following notes, Feb. 2, 1856 : —“I believe the Hedgehog feeds on eggs—the following will go to prove it. About thirty-five years ago, I was travelling late in the evening along a footpath by the side of a hedge. On my way I was attracted by an awful fluttering and flapping of wings, as if of some bird in deadly conflict. On proceeding near the spot whence the sounds issued, I was astonished to find a partridge striking its wings and claws with utmost fury against some object at the root of the hedge. Had I been wary enough I could easily have caught the bird; but on touching it, it made its escape, when the object of its hatred became apparent; for there, in the nest of the poor bird, I laid hold of a large Hedgehog. All the eggs were broken, except one. I carried away the *hurcheon* from the nest for nearly a mile, and then set it at liberty. I think it could have no other intention there than that of carrying off, or eating, the eggs. The Hedgehog seems to be a very common animal in this neighbourhood; I have seen it in many places. Some years ago I discovered a brood of young ones, with their mother, by the root of a tree covered with withered leaves, at Ninewells—there were four young ones at least, all naked of spines.”

LAMB REARED BY A COLLEY.—Mr. James Telfer, of Saughtree, Liddesdale, a poet and prose writer, well known on the Borders, communicated the following circumstance, for which he vouched the truth. The letter is dated 17th Jan., 1853. “A curious thing happened at the herd’s house, Worms-cleugh, in this water-head (four miles from this), in 1835 or 6. The herd, a cousin of mine, had a colley bitch which chanced to have a litter of pups in the middle of the lambing time, when her services could be badly wanted. The pups were accordingly drowned, and the poor disconsolate mother was forced to follow her master to the hill. It happened to be a very bad lambing time—the ewes had almost no milk, and many of the young lambs died of hunger. The herd carried home one day a motherless lamb (as herds are in the habit of doing), and the lamb and the bitch during the nights were co-occupants of the byre. To cut my tale short, the bitch and the lamb drew up, and wonderful to say, the bitch suckled the lamb, and the lamb thrived upon such nursing, and like Maillie’s lamb, ‘lived to be a beast.’”

TRADITION OF THE ORIGIN OF THE CHEVIOT SHEEP.—Mr. William Oliver, formerly of Langraw, near Hawick, gave me this curious notice, 22nd March, 1856. “Do you chance to know anything about the origin of Cheviot Sheep on the Borders? I imagine that the breed was anything but homogeneous at one time. It differed considerably in different parts of the Borders too, as indeed it does yet. I have heard it said by old people here, that the Cheviot Sheep dated its origin from ‘the thirteen drift days.’ I have forgotten when that was, but the stock in this part of the Borders was all but totally destroyed, and so difficult was it to procure sheep that people were glad to take any sort that came to hand; and from this mixed breed came the so called Cheviot Sheep. I recollect well enough since the sheep on the Borders here had a decided cast of the Southdown in them; and a large proportion of them had grey faces.”—The “thirteen drift days” happened in 1660, and were, one would think, almost out of memory. The breed Mr. Oliver himself saw, may have originated after the great storm of 1794, long known as “the Gonial Blast,” that destroyed entire flocks in the south of Scotland.

STOAT ATTACKING MAN.—During the summer I had some conversation with an intelligent youngster about such animals as he knew. He said there were two Weasels; one the little “Grass Weasel,” which does harm to no one, and the other the “Stout,” of which he has considerable apprehensions, from a circumstance that happened to him when he was a herd-boy at some place in Berwickshire. His mother was accustomed to carry out his breakfast, and then leave him to eat it at his leisure. One morning when thus engaged, he heard a curious chirping near him, and looking up, he espied a large Stoat standing upright not far off, and staring at him with its wild eyes, and apparently determined to act on the aggressive. He then heard the chirping rising on all sides of him, as if he was going to be surrounded, and springing up, darted away, with the family of Stoats (for such they were) in pursuit of him, but he was too nimble for them, and effected his retreat. I have heard of several other instances of assemblages of Stoats attacking man.

NUMBER OF YOUNG RATS PRODUCED AT A BIRTH.—Recently a writer in “The Builder,” treating of the productiveness of the Brown Rat, made the assertion that a doe-rat

brought forth "from twelve to twenty-three at a litter," and performed this productive feat from six to eight times a year. In a letter to "The Times," Mr. James Nicholson has shewn that this is egregiously overstated, and that it is rare that more than nine is the produce at a birth. He writes me, that he has since learned that his opinion is shared by a mole-catcher of great experience, who told him that nine rats is about the maximum number in a nest. "He further stated, which, if true, is rather curious, that rats as well as moles always produce an odd number of young at a birth. The old saying, 'There's luck in odd numbers,' would appear to hold good with this prosperous branch of the family of Rodents."

ON BIRDS AT MOSSBURNFORD, NEAR JEDBURGH, &c.—I had some correspondence on this subject with my late friend, Mr. Archibald Jerdon, in January and June, 1856, which, as we have not had a report on the birds of Roxburghshire, is worthy of extract. Except notices of arrivals of migrants, this is almost the only allusion to ornithology that I have found among his numerous letters addressed to me. "I quite agree with you," he says, "that the 'Rose Lintie' is the male of *Fringilla cannabina*. *F. Linaria* (Lesser Redpole) is by no means a common bird, and quite unlikely to attract the notice of our rustics. I have seen it once or twice in early spring, but it is a rare visitant, and does not breed with us. I believe it breeds in the county of Durham, as I have seen it there in summer. Do you know the Siskin? I have seen one or two small flocks this winter (1855-6), feeding on the seeds of Alder. It is a very pretty and interesting little bird, and resembles the Redpole in many respects. *Sylvia hortensis* and *S. sibilatrix* are common in this neighbourhood. *Parus palustris* is not uncommon; and *Loxia curvirostra* has more than once occurred to me—*Motacilla flava* only once. The Stonechat is a rare bird here, and I only know one locality which it frequents. The Redstart and the Grey Flycatcher (*Muscicapa grisola*) are tolerably abundant here; but being both shy and retiring birds, are apt to escape notice. They both breed in the Red Sandstone scaurs which overhang the Jed in various parts of its course; at least the Flycatcher does, and I often see the Redstart in the same localities. We are very deficient in birds of prey. The Sparrow-hawk, Kestrel, and Merlin (at times) complete our list. The Coot is found

on some ponds as at Nisbet, near Mount-Teviot (Lord Lothian's). The Teal is not a very uncommon bird here. The Cuckoo occurs principally in the upland districts, and on the borders of moors." To this I may add that Mr. Boyd informs me that the Golden Eye Duck frequents in winter the Teviot opposite Ormiston; and that the Little Grebe is not a rare bird either in the Teviot or the pond near Nisbet. There is also a small Heronry at Ormiston among some tall firs, at a little distance from the house. The Blackcap Warbler and the Grey Flycatcher make the grounds and garden their favourite resort. Mr. Jerdon continues his observations in a letter of the same year, dated August 13th. "From examinations that I made at one time of the intestines of Blackbirds and Thrushes, I came to the conclusion that all seeds, save the harder ones, such as the stones of haws, &c., were comminuted in their passage through them. But occasional seeds may escape the action of the gizzard." On the disputed question of the origin of the immense flocks of Wood Pigeons that periodically visit the lowlands, he sends me the following query and his own solution. "Do you think there is any accession to the number of our Ringdoves in winter? A gentleman in this neighbourhood, who is an extensive farmer, stated to me the other day his decided opinion that there is an immigration of these birds from some quarter. I am disposed to think, however, that the junction of the summer and autumn broods of a district, and especially the descending to the lower parts of the country of those bred in the upper or upland parts, is sufficient to account for the large flocks we see in winter and early spring." Not having paid particular attention to the increase of these birds during the winter, I consulted some gamekeepers, and they informed me that the strange birds are richer coloured than those reared in the vicinity, and that their plumage has a purplish lustre. I am not personally cognisant of this as a fact; but if it can be demonstrated, we might ascertain the country or district where the Wood Pigeon is characterised by this brighter hue. This note contains the only observations, during a correspondence of many years, that have not appeared in the pages of the Club's "History." Mr. Jerdon's attention thereafter was almost entirely devoted to botany.

EAGLE AMONG THE CHEVIOTS.—During the spring of 1874, a grey-backed Eagle made its appearance among the

Cheviots, and furnished for a season a fine spectacle for the shepherds. It ranged from Broadstruther heights down to the junction of Harthope and Care burns, and lived upon dead sheep. The shepherds observed that it rose spirally, and then swooped suddenly down. It was last seen in March. They thought it was a Golden Eagle, but I set it down for an Erne, or White-tailed Eagle. In former times the White-tailed Eagle, or some other species, frequented Ruberslaw, for Leyden preserves the shepherds' recollections of it—

“Dark Ruberslaw, that lifts his head sublime,
Rugged and hoary with the wrecks of time!
On his broad misty front the giant wears
The horrid furrows of ten thousand years;
His aged brows are crowned with curling fern,
Where perches, grave and lone, the hooded Erne,
Majestic bird! by ancient shepherds styled
The lonely hermit of the russet wild,
That loves amid the stormy blast to soar,
When through disjointed cliffs the tempests roar,
Climbs on strong wing the storm, and, screaming high,
Rides the dim rack, that sweeps the darkened sky.”

BUZZARD (*Buteo vulgaris*).—A bird of this now very uncommon hawk, was seen in the end of September or beginning of October, moving in its slow leisurely flight along the North British Railway between Pease Bridge and Cockburnspath. It was only a passing visitant, and occurred about the same time when others visited the vicinity of Kelso.

KINGFISHER.—The Rev. Andrew Baird, in the “Statistical Account of Berwickshire; Parish of Cockburnspath and Oldcambus,” p. 299, makes the unfortunate remark that “on the margins of the little streams we frequently see the beautiful Kingfisher.”* This is true of the Water-ouzel, but we have not the Kingfisher at all as a resident bird; and the only example I have heard of is one shot in the beginning of January, 1875, in the meadow between Cockburnspath and Dunglass, which had probably come from

* This is not the only mistake in the Zoology of the parish. The author mentions a tradition of a Wolf, whereas the tradition refers to a Wild-boar. He also speaks of the Martin inhabiting the woods near the Pease Bridge; the last animal being the Wild-cat. The mis-statements have arisen from not making due enquiry, while the writer was, as yet, a comparative stranger. I make this correction, as I may not have another opportunity.

some of the East Lothian streams. On the river Eye it has been observed near Reston, and occasionally as far up as Grant's House; but it is a scarce bird even on the Whitadder, where it breeds.

GREATER TIT (*Parus major*).—About Cockburnspath this goes by the name of "the Bee Eater." It is said to be a great enemy, as indeed old apiarian writers instruct us, to the hive-bees, descending suddenly from the tall trees that surround village gardens, and as the bees issue out and in, carrying off its prey without any compunction.

MISSIL THRUSH.—On May 2, being in the Tower dean, a Missel Thrush glanced past me, in furious pursuit of a Jackdaw. The Jackdaw was in terror, and uttered an inward *crowy* complaint of not being let alone, and wheeled every way to avoid an attack. On the same day, at the Pease Bridge, I saw another Missel make a dart at a passing Jackdaw, and drive it in hot haste through one of the arches of the bridge. Gilbert White has celebrated its dauntless conduct in guarding its nest, regardless of the bulk or weight of its assailant. Looking out of a window, May 17, I observed how it stowed away a very bulky worm, which it had seized on a grass-plot. It first cut it into sections at the one end, with repeated strokes of its bill, and swallowed them: and then finding the remainder manageable, bore it off to its young. It is called "the Red-rumped Thrush," in North Northumberland; "Scricket" in South Durham; "Feltyflee" and "the Big Mavis," in Berwickshire.

STARLINGS.—Starlings stun worms by a "dab" on the narrow end; crumple them up neatly in folds till they have gathered a mouthful, with which they hasten off in level flight to their nest. They are said also to collect grey slugs; and they pick up small stones to assist digestion.

SAND MARTIN.—A prolonged fight was witnessed on the river Till, between two Sand Martins, which had fallen out about their respective proprietary rights in a hole adapted for a nest. They did not separate till they both fell into the water, from which they had great difficulty in recovering themselves (May, 1874).

DEPARTURE OF SWALLOWS AND MARTINS.—Chimney Swallows were present at Coldstream, September 23rd. They had left Hauxley before September 17th. Martins were at Millfield, September 25th, and at Wooler, September 26th, which was their last day there. That evening a

large assemblage of swallows, my informant could not testify to the species, was seen over that town, flying high in the air, and wheeling round and twittering, preparatory to leaving, and apparently congratulating each other with the success of their visit, and overjoyed once more to be recalled to their mysterious winter home. At Oldcambus they did not depart till October 6th, but it was probably a party of late nestlings, whose retreat had been delayed.

WHITETHROAT.—The Whitethroat is popularly known as the “Whushie-whey-beard” and “Jenny Cut-throat.” When irritated or disturbed, the ruffled feathers about its throat make it appear goitred, or as if it had once attempted a *felo de se*. When it arrives early in May, it diverts itself for a time before fixing on a nesting place. You see one dancing a jig in the air at one end of an open glen, two or three in the middle of it, and where you make exit from the thoroughfare another is practising its restless song and irrepressible antics. When you approach its chosen bush in a hedge, how rapidly it winds itself downwards through the interlacing intricacy of twigs and branches to the bottom, at the point furthest from the spectator; slips out in a low flight up the side of the hedge, and when it is sufficiently far beyond his reach, whips over the hedge and hides itself, soon again to renew its pranks on its new practice ground! It is of bad repute, being accused of sucking the eggs of other small birds; but it is to be hoped that this is fabulous. It is a pert, prying little creature.

SPARROW.—On a former occasion, I recorded an instance of a Sparrow, for some unknown purpose, carrying away the green leaf of a cherry-tree to its young. On May 21st, I took notice of one several times bearing in its bill the petals of hawthorn blossom to its nest in the eaves. Some of them having dropped, were found to be such without doubt.

GOLDFINCH.—A flock of this now rarely seen bird has been notified to me as having visited the neighbourhood of Cockburn Law, near the end of November. I saw, several years since, a few Goldfinches on a road-side here, picking thistle-seeds; and about 1835, I witnessed another family party, during snowy weather, surrounding some scattered thistles in a field at Penmanshiel. When my father was a boy, about 1793–4, he says great numbers frequented the top of the sea-banks at Oldcambus, where they fed on the

seeds of the burdock, that weed being very abundant then. It still shews itself, but it is not allowed to seed if we can prevent it. Some birds, perhaps Grey Linnets, appear still to be very fond of the seeds, as the withered burrs are often torn in pieces.

SNOW BUNTING.—When a boy I was well acquainted with the fields “where the snow-flake reposes.” The birds allowed of such a near approach that they could almost be “clapped”; but if this was foolishly attempted, there was a sudden rise into a high wild flight, as if they had been accustomed to dash down the steep of elevated mountains into any amount of wide empty space; and they never alighted except afar off, where, if followed, they exhibited the same signs of apparent familiarity, but of actual untamedness. Its loose way of flocking, and straggling manner of flying is that of a bunting, and not the straightforward, compact combination of an assemblage of finches. At their arrival and departure numbers resort to the fields bordering the sea. At the latter stage the male plumage gets very mealy in its hues. They are most rapid runners, and appear to be accustomed to crouch and hide among rough ground and rocks. One day I observed one resting on the cope of a stone wall, but when it became conscious that it was attended to, it ran here and there among the top stones like a mouse, and then dropped down on the side that I could not reach. It then hastened crouching along the wall-side, and perceiving that I followed, it stood up on its legs like a lark, and uttering its peculiar “treet,” “treet,” disappeared; and that is all you get to know about this “wild bird of the wandering wing.”

FOOD OF THE WOOD PIGEON.—In some parts of East Lothian, where the soil is subject to the growth of wild oats, Wood Pigeons are very fond of its fallen seeds, and sometimes cram their crops to that degree, that, owing to the seeds swelling when moistened, they burst; and thus some of the birds fall victims to their extreme voracity.

GREEN SANDPIPER (*Totanus ochropus*).—September 19th, I roused a bird, which from its plumage, so far as I could judge, was this migrant, at the side of the pond at upper Humbleton, near the base of the “Heugh.” It was dusky coloured, with the rump or base of the tail, and also the belly white; about the bulk of a Blackbird, and with a call-note allied to that of the Golden Plover.

EARLY WOODCOCK.—Mr. Dand told me that about the 17th or 18th of September, he was surprised to flush a Woodcock near Hauxley. It was supposed to have come with a recent easterly wind.

RICHARDSON'S SQUA GULL (*Lestris Richardsonii*).—On the 29th of October, Mr. Andrew Wilson obtained a pair of Richardson's Squa Gull, from a Coldingham fisherman, which had been captured twenty miles off St. Abb's Head. In the fishermen's experience they are rare.

THE ARTAXERXES BUTTERFLY (*Lycæna Artaxerxes*).—A letter in "The Scotsman," during the summer, created some alarm in the entomological world, as if because this butterfly was recklessly hunted on Arthur's Seat, the whole of Scotland would thereby suffer bereavement. In my experience this, although a local, is a common butterfly on the Borders, and may allow of any amount of capture without being perceptibly diminished; and appears to be present wherever the *Helianthemum vulgare* (Dwarf Cistus) flourishes. Especially is it common about Penmanshiel, along the post-road side from Grant's House to the Tunnel, and in the open glades in the unplanted parts of the adjacent woods. It again frequents the sunny slopes in Howpark dean, and equally those on the many windings of Dowlaw dean. On a limited portion of Oldcambus dean, it is more or less to be expected annually. It may be sought for among the many inequalities of rising ground to the east of Earnshaugh; again on the sea-banks and hollow deans near Hallydown; and always successfully on Alewater braes. Moreover it frequents the south bank of the Whitadder from Hoardweill up to Retreat; and doubtless enjoys many other secure breeding places not liable to be disturbed. On the 6th July, I was pleased to come upon one of its colonies, while at Crailing dean, in Roxburghshire, in company with Mr. W. B. Boyd. The Rev. T. C. Anderson had accompanied us, and a subject of conversation was the erroneous impressions entertained of its rarity, and having observed the food plant of the caterpillar on the banks, I felt assured that the butterfly would not be far off. Mr. Anderson had to leave, but shortly after one was captured, and enough to satisfy any one might have been had if we had wanted them.

II.—BOTANICAL.

INTRODUCTION OF POTATOES AND TURNIPS INTO HOBKIRK PARISH, ROXBURGHSHIRE.—Mr. Oliver wrote me on this subject, March 15, 1856, and his remarks have lost nothing by not earlier seeing the light. "There are few notabilia here, about the introduction of Potatoes or Turnips. I could ascertain the date, nearly, of the introduction of Potatoes into this neighbourhood. My father used to relate an anecdote connected with their first cultivation by a Mr. Chisholm, of Hobsburn (now Green-river) in this parish (Hobkirk). Mr. Chisholm had planted some in his garden, and a lad at a farm place not far distant hearing much said about them, and supposing they must be something good, set off at night and stole a few. He used to relate afterwards that on trying to eat them raw, as he did, he found them to be poor stuff; but thinking that they ought to be good, he persisted in eating some. The name of this man was Robert Renwick, and as it happens his name is the first on the Parish Register here. Mr. Chisholm also introduced the Turnip into this neighbourhood."

POTAMOGETON FILIFORMIS.—In 1870, a pond in Oldcambus dean was cleaned out, in which nothing grew except *Glyceria fluitans* and *Callitriche verna*. This had never been attempted before, and, as showing its age, several horse-shoes of the old small breed of Border horses were dug out. After the mud was removed, the bottom was full of stones, either diluvial, or derived from adjacent glitter debris. The water is derived from a drain issuing from springs. This season patches of *Potamogeton natans*, unknown there before, began to show on the surface; and towards autumn some lurid masses of a peculiar water weed were observed round the shores, which were determined to be *P. filiformis*. The only other Berwickshire locality for it (and it is a rare plant elsewhere in Scotland) is Coldingham Loch, and there it grows among stones and gravel in a much less pure quality of water. Can the laying bare of the stony bottom have conduced to its growth? The pond is frequented by ducks, water-hens, and occasionally by the coot, which may have brought the seeds of both these pond weeds. They could scarcely have remained so long undamaged in the mud at the bottom; nor have they arisen from one seed only, as they are dispersed: perhaps the broken shoots produce radicles. Seed was rare in *filiformis*. Hooker, "British Flora," 1837, classes it with *P. pectinatus* as *marinus*.

HYOSCYAMUS NIGER.—In the Lanton locality, the Rev. P. G. McDouall informs me that in cutting a new piece of road to facilitate crossing the river Glen, at what was an old mill, Henbane grew up in quantity, and still continues. It is supposed to have sprung up on the site of an old midden. It is so isolated here, that one may suppose that it has once been sown as a rustic medicine. In few places have I seen such a display of the common Mallow as here, flourishing on both sides of the way, where once stood, now much curtailed, the long straggling village of Lang-town, or Lanton. Lanton Tower is a mere fragment of wall perched on a hillock behind the farm house.

CHELIDONIUM MAJUS.—Hedge-side at the east entrance to Kirknewton; probably an outcast. The plant in the Wooler locality is a double garden variety. I did not see whether this was or not.

NASTURTIUM TERRESTRE.—Pond side at Fowberry Mains.

THLAPSI ARVENSE.—Wall-top near Wooler-haugh-head.

CALAMINTHA ACINOS.—In a grass field near Oxendean, Dunse (Aug. 5). On the same occasion I gathered *C. Clinopodium* in the wood overhanging Cockburn Mill; and saw *Campanula latifolia* plentifully near Burnhouses.

GLYCERIA PROCUMBENS.—Roadside between Holy Island town and the Castle. It has been recorded for the Farne Islands.

GERANIUM PUSILLUM.—Side of a wall; same locality.

CAREX MURICATA.—In fine order in the Fern dean near Paxton House.

ORCHIS INCARNATA.—In several damp places in the west end of Holy Island.

LISTERA OVATA.—Banks of the Tweed in Floors Castle woods, near the walk.

TULIPA SYLVESTRIS.—Plentiful at Longnewton, in what has been an old orchard. It was pointed out by Mr. Scott-Dudgeon.

"KATE'S HAIR."—This is supposed to be *Alectoria jubata*. In Vol. vi., p. 370, I stated from recollection that "Kate's Kist," on which this production grows, is situated on Hedgehope. I find from an inquiry that I had made, that it is a sandstone rock, and is part of the range of hills near Pondicherry on the Coquet.

On some of the Birds of Lauderdale. By ANDREW KELLY.

HALIAETUS ALBICILLA.—During the present autumn, a White-tailed Eagle was observed resting on the top of Hunt Law, one of the highest peaks of the Lammermoor range, after it had breakfasted on some carrion at the foot of the hill. It was watched, but did not return to the bait.

FALCO PEREGRINUS.—About three or four miles up Longcroft water, there is a great scaur, into which projects a lofty precipice capped with juniper bushes, whereon the Peregrine maintained its eyrie uninterrupted till last year, when it was relinquished; but not, I believe, until it had been harried once or twice. Even yet, although they may have changed their eyrie, they still prey over the whole of this district for red grouse, of which they are very fond; and, I have even heard it said, they feed their young on nothing else.

FALCO ÆSALON.—The Merlin is by no means rare in Lauderdale and its neighbouring hills. Mr. Scott tells me he will shoot on an average two or three birds every year. They nest generally in the rocky scaurs, but I see where there are trees, they prefer them; and Mr. Scott thinks they would always build on trees if they could find them conveniently—and few can have had greater experience of this beautiful little Falcon.

FALCO TINNUNCULUS.—The gin and the gun have all but swept the Kestrel from our district; but, indeed, all the hawks have experienced the same heartless cruelty.

BUTEO VULGARIS.—Six or seven specimens of the Buzzard have been obtained here, in about the same number of years. Mr. Walter Simson, while dissecting one of these birds, found an adult mole, which it must have swallowed at one gulp, as the skin of it was not even broken.

BUTEO LAGOPUS.—Twenty years ago, Mr. Simson, Lauder, added the Rough-legged Buzzard to his collection. It was caught, he tells me, by the shepherd of Huntington, who, one day, whilst engaged in looking over the fields, came suddenly upon it eating a rabbit. At his approach, the Buzzard moved off slowly, and, as he thought, reluctantly, from his half-finished meal, to the neighbouring wood. This hesitation encouraged him to set a trap and wait the result, which he had not long to do, for in a trice he was back and

was secured. The Buzzard was blamed for killing a hare in the same field, which was quite warm and appeared as if it had been the victim of a hawk. Ten years later, and another Rough-legged Buzzard was caught in a similar way, by one of the rabbit-catchers, who had it conveyed to the Luggy, where it was thoroughly examined by Mr. Scott and Dr. Riddell, Lauder, and declared by them to be that bird. What was rather awkward, the Buzzard, for proper security, was chained by the foot in the garden for the night, but in the morning he was flown, chain and all, and never afterwards found.

CIRCUS CYANEUS.—The Common Harrier was once very numerous in the subalpine ranges of the Lammermoors. Twenty or twenty-five years ago, and for half-a-dozen years later, it was thought nothing wonderful to see three or four of them skimming the sombre heath, and making everything liftable on it their prey. Their nests were commonly built with heather-birns—great broad things, three or four feet round—either in heather bushes or scaurs. Sir William Jardine remarks of their young, “they are well supported with food, *we believe by both parents.*” This appears to be groundless, as the male bird, unassisted, supplies his own table; and well he seems to accomplish it, as the heads and bones strewn round the eyrie and the adjacent ground testify. His method of doing it is rather singular. As soon as he has taken a prey, he makes off to his eyrie, rising higher and higher till he gets right over it; when he peers suspiciously all round to see if the coast is clear. Having satisfied himself that there is no lurking enemy, he reports himself to his mate by giving a sound something like “tchee,” “tchee”; she answers, and leaps into the air to catch the food which he has dropped, and whisks it off to her young. He, on the other hand, hurries on without alighting to a fresh foray. This will be repeated on an average once every hour by the male bird, so readily distinguished by his plumage.

OTUS BRACHYOTUS.—The Marsh Owl frequents all our moors sparingly. One or two of the nests have been found in the heather, in the month of June.

STRIX FLAMMEA.—At no distant date, the White Owl nested profusely at Old Norton and Norton Bridge.

NOCTUA TENGMALMI.—Mr. Scott shot a specimen, but he never thought of its rarity till it was too late for stuffing.

LANIUS EXCUBITOR.—Mr. Tilly, Lauder, was successful in shooting a beautiful specimen of this unusual visitant, (which was in company with a Magpie), late in October, 1872, on the estate of Allanbank, near Lauder. He noticed it on the morning of the same day in the Loan, about a mile from where it was shot. He could not, he said, understand what was the matter with all the little birds, they were flying about so strangely in a perfect panic, and the noise they made was perfectly deafening. On advancing, a Butcher Bird dashed away singing his usual call-note, "troole," "troole," and after a number of jerks and doublings among the trees, fairly gave his persecutors the slip. In two of these birds which came under my notice, each had swallowed a mouse entire; and I do not believe in its alleged impaling of its prey upon a thorn.

TURDUS TORQUATUS.—On Longcroft water, far up among the junipers, the Ring Ouzels have their stated visits every year. They are most clamorous when one approaches them during the breeding season.

SYLVIA TROCHILUS.—In the wood at the side of the Luggy in great numbers. The other birds in the same secluded retreat are, the Wheat Ear, Whin-Chat, Stone-chat, Redstart, Long-tailed Titmouse, Siskin, Lesser Red-pole, &c.

BOMBYCILLA GARRULA.—The Waxwing must have visited Lauderdale at a very early period. A wing of one, carefully kept as a family relic, can be proved to have had a century of existence.

FRINGILLA MONTIFRINGILLA.—At Pilmore, the Bramblings congregated in fifties among the lint refuse, left after thrashing; the little creatures very sensibly preferring it to beech-mast, a sort of do no better with them.

FRINGILLA CARDUELIS.—The clearing away of thistles everywhere has bereft us of the Goldfinch.

LOXIA CURVIROSTRA.—In the winter of 1850, a small flock of Crossbills visited Lauderdale, and tarried some weeks in the old fir wood opposite Thirlstane Castle, and then suddenly disappeared. Before they left it was supposed they were pairing. In 1857, they again visited us, making their sojourn even more prolonged; but never settled down to nestle.

CORVUS CORAX.—Found in a rabbit trap in Edgarhope

wood, last year. The Raven must be looked on as a straggler here. Ravens used to nest in force at the West Hope.

CORVUS CORONE.—This is the “Hoodie” of the Borders, the Grey-backed Crow being called the “Sea-crow.” In Lauderdale these two are occasionally found paired during the breeding season. *C. corone* here invariably builds its nest of heather birns, and lines it with wool.

GARRULUS GLANDARIUS.—Two specimens of the Jay were shot by Peter Scott in Airhouse old birch wood; one last year, the other some years’ previously. One of these is in the fine collection of Mr. Tilly, Lauder.

PICUS MAJOR.—Mr. Simson procured a specimen of the Great Spotted Woodpecker in the policy of Thirlstane Castle, being, as yet, the only one in the district.

CUCULUS CANORUS.—The female Cuckoo in the hill district invariably elects the nest of the Meadow Pipit wherein to deposit her eggs. She alters the nest for her purpose, her first procedure being to tear it out into an oblong shape, making it two or three times bigger than the original; and yet, strange, for all this the Pipit seems to take no notice, but hatches away in the sorry nest, although I have seen it little better than a mere surface.

ALCEDO ISPIDA.—A pair of Kingfishers for long frequented the banks of Longcroft water from its mouth to or near Cleekhimin, and nested in what is called the Redbrae. There being no trees on that part of the stream, the bird was obliged to watch its prey from a rock. I noticed that it never dived till the fish was at the surface, and then, as Dr. Brehm remarks, it returned with it to its former station, where it killed its captive by shifting its position in its bill so as to grasp the fish by the tail, and then it struck it firmly against the object on which it rested.

HIRUNDO URBICA.—One of the finest natural breeding places of the Martin is on the face of an almost precipitous natural rock at the side of the Whiteadder, below Edrington Mill.

CAPRIMULGUS EUROPÆUS.—Last summer, on a fine July night, I saw a Goatsucker whirring round and round a tree in full pursuit of moths; but seeing me a little way off, at the same trade, he decamped.

COTURNIX COMMUNIS.—Two Quails were shot in a stubble

field belonging to Mr. Stuart, Collielaw, in September, 1871.

CHARADRIUS MORINELLUS.—The mid hill of Lauder commonly used to be their great resort. Both Mr. Tilly and Mr. Scott tell me that Dotterels have nested on the out-ground of Broadshawrig, year after year, to their knowledge for ten years. I saw a young bird that Mr. Scott had shot.

CHARADRIUS HIATICULA.—Mr. Walter Simson, who has been on the banks of the Leader for fifty years, has only seen one Ringed Plover*.

GRUS CINEREA.—A Crane was shot by the late Charles Simson, Esq., of Threepwood, on the Threepwood estate.

BOTAURUS STELLARIS.—I have ascertained from Mr. Simson that Huntleywood Moss was once (1810) a favourite haunt of the Bittern, or "Bull-in-the-Bog," and for thirty years later occasional birds had been gotten; but it is now quite deserted.

SCOLOPAX GALLINULA.—Foot drains on the uplands are preferred by Jacksnipes, but they are never anywhere numerous.

RALLUS AQUATICUS.—Specimens have been repeatedly got in Leader. They also frequent Legerwood Loch.

FULIGULA FERINA.—There are several specimens of the Pochard in the local collections here; and on inquiry I find they have all been got in the neighbourhood of the Leader.

MERGUS MERGANSER, *vel* CASTOR.—St. Leonard's Cauld has always been the well-known haunt of this beautiful bird; no fewer than seven or eight pairs visiting it in a season; but like many other interesting fowls, they are now getting few and far between.

PODICEPS MINOR.—Mr. Scott shot a pair of these birds of either sex, in January, 1875, in St. Leonard's Cauld. When

* In the beginning of August, 1868, Mr. Jerdon and I, in crossing from Threepwood Moss to Colmslie wood, started a Ringed Plover out of a ditch; and again flushed it at a small pool above Langshaw Mill, in the valley of the Alwen. Mr. Brothereton says, "The Ringed Plover breeds as far inland as Kelso. Mr. T. Lindsay has both the old and young birds, got many years ago on an island in the Tweed at Kelso; and I have a pair of old birds shot on the island at Banff Mill, three miles below Kelso."—J. H.

he first came in sight of them, they were standing on a broad hemming of ice enclosing the water; but this was only momentary, as both plunged into the water and re-appeared on the same place; and this action was repeated over and over again. They were feeding, he thought, on the spawn of the trout. He crept nearer them under cover of the branches to get within shot. Perceiving they were watched, they instinctively kept in the water, only occasionally putting up their beaks for air in the current; the ice preventing them from getting under shelter of the willows and other strong herbage at the sides. Many years previous, Mr. Simson, Lauder, obtained a specimen from the same place; and he also almost succeeded in "gumping" another, much later during the summer season. The Little Grebe is very uncommon here.

URIA TROILE.—Some six summers since, Mr. Simson captured one swimming in the Leader, at a place called the Hatter's Hole.

MERGULUS ALLE.—This quaint little traveller, the Rotche of Arctic voyagers, actually made his way here, a distance I should suppose of not less than thirty or forty miles up the Tweed basin, before he was captured by a workman, about Harryburn House, who, seeing the little fellow paddling up the burn, hauled him out with his hoe.

PHALACROCORAX CARBO.—A Cormorant was found in a dying state, at Tollishill, some fifteen miles from the sea.

LARUS RIDIBUNDUS.—The Black-headed Gulls are abundant in Legerwood Loch, which has from time immemorial been one of their favourite breeding places.

THALASSIDROMA PELAGICA.—Once during a severe gale, a Storm Petrel was shot as far inland as Oxtou, six miles north from Lauder.

ANDREW KELLY.

List of Araneidea and Phalangidea, collected from October, 1871, to October, 1874, in Berwickshire and Northumberland, by Mr. James Hardy. By the Rev. O. P. CAMBRIDGE, M.A., C.M.Z.S.

THE following list has been drawn up at the request of Mr. James Hardy, to whose kind exertions I am indebted for an exceedingly valuable and rich collection of Arachnida (chiefly Araneidea) from various localities in Berwickshire and Northumberland. The list is arranged in accordance with the views expressed in "A Systematic List of the Spiders at present known to inhabit Great Britain and Ireland," published lately in the "Transactions of the Linnæan Society," Vol. xxx., pp. 319-333. To this publication, and others there noted, I must refer those who may desire to ascertain the various additional synonyms of the genera and species now recorded, as well as for references to the works in which they are described or figured.

The present list contains one-hundred-and-sixty species of Araneidea, and two only of Phalangidea. Of the former, eleven have been described as new to science, and three as new to Britain (see "Linn. Trans.," xxviii., pp. 523-555, pl. xlv., xlv.) Three other species have since been decided to be new to science; and of these three, descriptions are contained in the list below. Of the forty-two genera represented, three (*Linyphia*, *Neriëne*, and *Walckenaëra*—comprising the *Micro-Araneæ*), monopolize eighty-seven out of the one-hundred-and-sixty species contained in the whole collection. This large proportion is partly to be accounted for by the nature of the localities chiefly searched,—mountain-sides and summits, moor, and waste land; partly from the time of year,—autumn and spring; and partly because, in all probability the actual existing proportion of other species to those of these three genera, gets less and less as we advance northwards. Of the four-hundred-and-sixty species of Araneidea up to this time recorded in Great Britain, one-hundred-and-ninety-nine belong to the three genera mentioned—a proportion considerably smaller than that borne by the eighty-seven species to the total one-hundred-and-sixty of the present list. Thirty-six genera of the known British Spiders are unrepresented in Mr. Hardy's collection. Some of these will, no doubt, be met with in other localities, and perhaps in some of the same when searched at other

times of the year. We may feel, however, tolerably certain that there are many other species of the Micro-Araneæ yet to be found in the North of England and Scotland. Only one in this list—*Linyphia reticulata*—can be said to represent an Alpine fauna, being the only species identical with any known one peculiar to a high Alpine range; probably higher altitudes further north would produce other species found at from 4,000 to 8,000 feet altitude in the Swiss Alps and Tyrol.

The following analysis of the collection may perhaps be of interest as shewing the distribution of species among the genera represented:—

	Species.		Species.
Fam. DYSDERIDES.		Fam. THERIDIIDES.	
Gen. Oonops -	- 1	Gen. Asagena -	- 1
„ Harpactes -	- 1	„ Neriene -	- 31
„ Segestria -	- 1	„ Walckenaëra -	- 19
Fam. DRASSIDES.		„ Pachygnatha -	- 2
Gen. Micaria -	- 1	„ Tapinopa -	- 2
„ Drassus -	- 2	„ Linyphia -	- 37
„ Gnaphosa -	- 1	„ Ero -	- 1
„ Prothesima -	- 2	Fam. EPEIRIDES.	
„ Clubiona -	- 7	Gen. Meta -	- 2
„ Anyphæna -	- 1	„ Tetragnatha -	- 1
„ Hecaërge -	- 1	„ Cercidia -	- 1
Fam. DICTYNIDES.		„ Zilla -	- 2
Gen. Dictyna -	- 1	„ Epeira -	- 4
Fam. AGELENIDES.		Fam. THOMISIDES.	
Gen. Amaurobius -	- 1	Gen. Xysticus -	- 7
„ Cœlotes -	- 1	„ Philodromus -	- 1
„ Tegenaria -	- 1	„ Thanatus -	- 1
„ Tetrax -	- 2	Fam. LYCOSIDES.	
„ Cryphœca -	- 1	Gen. Pirata -	- 1
„ Hahnina -	- 1	„ Trochosa -	- 4
Fam. THERIDIIDES.		„ Lycosa -	- 6
Gen. Pholcomma -	- 1	„ Tarentula -	- 2
„ Theridion -	- 3	Fam. SALTICIDES.	
„ Nesticus -	- 1	Gen. Epiblemum -	- 2
„ Phyllonethis -	- 1	„ Attus -	- 1

With regard to the names of the species, in the subjoined list, found severally on the Scottish and English sides of the Border, local naturalists interested in the point may easily separate them by noting the localities given here for each species. The total number of Araneidea from Berwickshire

appears to be seventy-six, and the total from Northumberland, one-hundred-and-forty-five. Of the Phalangidea, one is from Berwickshire, the other from Northumberland.

To form a complete list of Scotch Spiders to the present time, the records of Mr. Hardy's labours, many years ago (see "Spiders of Great Britain and Ireland," by John Blackwall, 1861-64), as well as those of myself in the "Zoologist" for 1862, Vol. xx., p. 8041; "Trans. Linn. Society," Vol. xxvii., pp. 393-463; and Vol. xxviii., pp. 433-458, 523-555; as also Mr. J. W. H. Traill's notices in the "Scottish Naturalist," ii., pp. 23-25, and p. 300, should be collated with the present list.

I must not conclude these few introductory remarks without expressing my thanks to Mr. Hardy, and a hope that he and other local naturalists will go on with the search he has hitherto so successfully prosecuted in the field of Arachnology. I feel sure that a continuance of the harvest he has reaped may be expected, and that many new forms, particularly among the Micro-Araneæ, will yet be found both in the North of England and in Scotland.

O. P. CAMBRIDGE.

Bloxworth, Dorsetshire, February 11th, 1875.

CLASS ARACHNIDA.

ORDER ARANEIDEA.

Fam. DYSDERIDES.

Genus *Oonops*, Templ.

OONOPS PULCHER, Templeton. An adult male and female; Berwickshire collection.

Genus *Harpactes*, Templ.=*Dysdera*, Bl., *ad partem*.

HARFACTES HOMBERGII, Scop. Adults and immature examples of both sexes; Berwickshire collection.

Genus *Segestria*, Latr.

SEGESTRIA SENOCULATA, Linn. Immature females, Oldcambus and Wooler; adult female, Cheviot district, Old Earle.

Fam. DRASSIDES.

Genus *Micaria*, C. Koch.=*Drassus*, Bl., *ad partem*.

MICARIA PULICARIA, Sund.=*Drassus nitens*, Bl., and *D. micans*, Bl. Adult male and female, Wooler.

Genus *Drassus*, Walck.=*Drassus*, Bl., *ad partem*.

DRASSUS TROGLODYTES, C. Koch.=*D. clavator*, Cambr. Adults and immature examples of both sexes; Wooler (Cold Martin Moss), Cheviot Hill, top of Cheviot, and Berwickshire collection. This spider appears to be widely distributed in England. I have found it at Southport, Lancashire; near Brighton; and in the isle of Portland. It is also found in most parts of the Continent of Europe, as well as in Syria, Palestine, and Asia Minor. The large size of the digital joint of the palpus in the adult male, and of the genital aperture in the adult female, will distinguish it readily from all other British Drassi.

—— *LAPIDICOLENS*, Walck. Numerous examples of both sexes, mostly, however, immature; Berwickshire collection, Cheviot Hill, Wooler, and Old Earle.

Genus *Gnaphosa*, Latr.=*Drassus*, Bl., *ad partem*.

GNAPHOSA ANGLICA, Cambr.=*Drassus lucifugus*, Bl. A single adult male; Berwickshire collection. The only previously recorded locality for this spider is Bloxworth Heath, Dorsetshire, where it is a rare species. It is unknown as yet on the Continent of Europe.

Genus *Prosthesima*, L. Koch.=*Drassus*, Bl., *ad partem*.

PROSTHESIMA PETIVERII, Scop.=*Drassus ater*, Bl. An immature male; Wooler.

—— *NIGRITA*, Fabr.=*D. pusillus*, Bl. An adult female, top of Cheviot; and another, immature, Wooler.

Genus *Clubiona*, Latr.=*Clubiona*, Bl., *ad partem*.

CLUBIONA GRISEA, L. Koch.=*C. holosericea*, Bl. Adults and immature examples of both sexes at Wooler and on Cold Martin Moss.

—— *TERRESTRIS*, Westr.=*C. amarantha*, Bl. Adults of both sexes; Wooler, and Berwickshire collection.

—— *PALLIDULA*, Clerck.=*C. epimelas*, Bl. An adult male at Wooler.

—— *COMTA*, C. Koch. Adult and immature examples of both sexes; Wooler, and Berwickshire collection.

—— *TRIVIALIS*, C. Koch. Adult male, Wooler.

—— *PALLENS*, C. Koch.=*C. diversa*, Cambr. Adult females, Wooler and Pease Cean; adult male, Cheviot Hill.

—— *RECLUSA*, Cambr. Adults and immature ex-

amples of both sexes, Wooler; a single adult female in the Berwickshire collection.

Genus *Anyphæna*, Sund.=*Clubiona*, Bl., *ad partem*.

ANYPHÆNA ACCENTUATA, Walck. Females, adult and immature, Pease Dean.

Genus *Hecaerge*, Bl.

HECAERGE MACULATA, Bl.=*H. spinimana*, Bl. Females, adult and immature, Pease Dean; adults of both sexes, Berwickshire collection.

Fam. DICTYNIDES.

Genus *Dictyna*, Sund.=*Ergatis*, Bl.

DICTYNA ARUNDINACEA, Linn.=*Ergatis*, *benigna*, Bl. Both sexes, but all immature; Wooler.

Fam. AGELENIDES.

Genus *Amaurobius*, C. Koch=*Ciniflo*, Bl., *ad partem*.

AMAUROBIUS FENESTRALIS, Stroem.=*Ciniflo atrox*, Bl. Adult females, Langleyford and Oldcambus; adults of both sexes, Wooler.

Genus *Cœlotes*, Bl.

CŒLOTES ATROPOS, Walck.=*C. saxatilis*, Bl. Adult and immature females, Cheviot Hill.

Genus *Tegenaria*, Latr.

TEGENARIA DERHAMII, Scop.=*T. civilis*, Bl. Immature females, Wooler.

Genus *Textrix*, Sund.

TEXTRIX DENTICULATA, Oliv.=*T. lycosina*, Bl. Adult females and immature examples of both sexes, at Wooler, and in the Berwickshire collection.

Genus *Cryphoea*, Thor.=*Tegenaria*, Bl., *ad partem*.

CRYPHOECA SILVICOLA, C. Koch.=*Tegenaria silvicola*, Bl. This species appears to be very generally distributed both in the Wooler and Berwickshire districts. Adult and immature examples of both sexes were found in almost all the separate collections from each of the localities in those districts.

Genus *Hahnia*, C. Koch.=*Agelena*, Bl., *ad partem*.

HAHNIA ELEGANS, Bl. An adult female. Cold Martin Moss.

—— MONTANA, Bl. Adult females, Berwickshire collection.

Fam THERIDIIDES.

Genus *Pholcomma*, Thor.=Theridion, Cambr., *ad partem*;
Erigone, Westr., *ad partem*.

PHOLCOMMA GIBBUM, Westr. = *Theridion projectum*, Cambr. Adults of both sexes of this very distinct and interesting little Spider, in the Berwickshire collection, as well as at Wooler and on the Cheviots. The only other locality yet recorded for it in England is Bloxworth heath, Dorsetshire; where, however, it appears to be of far greater rarity than in the northern localities.

Genus *Theridion*, Walck.=Theridion, Bl., *ad partem*.

THERIDION SISYPHIUM, Clerck.=*T. nervosum*, Bl. Adults of both sexes at Wooler; immature examples in several other localities, both in Northumberland and Berwickshire.

———— *DENTICULATUM*, Walck. Two adult males, Wooler

———— *PALLENS*, Bl. An adult male, Wooler; and an adult female, Pease Dean.

Genus *Nesticus*, Thor.=Linyphia, Bl., *ad partem*.

NESTICUS CELLULANUS, Clerck.=Linyphia crypticolenis, Bl. Both sexes, adult and immature, Berwickshire collection (Pease Dean and other localities).

Genus *Phyllonethis*, Thor.=Theridion, Bl., *ad partem*.

PHYLLONETHIS LINEATA, Clerck.=Theridion lineatum, Bl. Adults of both sexes, Wooler district.

Genus *Asagena*, Sund.=Theridion, Bl., *ad partem*.

ASAGENA PHALERATA, Panz.=Theridion signatum, Bl. A single adult female, Berwickshire collection.

Genus *Nerienne*, Bl., *ad partem*.

NERIENE ATRA, Bl.=*N. longipalpis*, Bl.=*Erigone vagabunda*, Westr. Adult males and females from various localities, both in Berwickshire and Northd.

———— *PROMISCUA*, Cambr. A single adult male, Cold Martin Moss; and another at Wooler.

———— *DENTIPALPIS*, Wider. Adult males and females; Wooler, Cheviot, and Berwickshire collection.

———— *GRAMINICOLA*, Sund. Adult females, Wooler district.

———— *NIGRA*, Bl. Adults of both sexes; Wooler, Hedgehope, and Langleyford. A single adult male in the Berwickshire collection.

———— *TIBIALIS*, Bl. Three adult males of this remarkable Spider (easily distinguished from *N. nigra* by the incrassation of the tibiae of the first pair of legs), found at Langleyford.

- NERIENE LONGIMANA, C. Koch.=*N. vagans*, Bl. Adults of both sexes; Cheviot Hill, Hedgehope, Humbleton Hill, and Old Earle, as well as in the Berwickshire collection.
- PYGMÆA, Bl. An adult male of each sex in the Berwickshire collection; adult males, Cold Martin Moss; and a single one at Wooler.
- RUBENS, Bl. Adults of both sexes; Wooler, Cheviot, and other localities.
- ISABELLINA, C. Koch.=*N. rubella*, Bl. Adults of both sexes, Berwickshire collection.
- HUTHWAITHI, Cambr. An adult male of this rare species, Wooler.
- DENTATA, Wider. Adult females, Wooler district.
- AGRESTIS, Bl. Adults of both sexes; Wooler, and Wooler district, Langleyford, Hedgehope, and in the Berwickshire collection.
- RETUSA, Westr.=*Neriene elevata*, Cambr. An adult male, South Middleton Dean; another on Cheviot Hill; and one in the Berwickshire collection.
- *UNCATA, Cambr., *sp. n.* Adults of both sexes of this fine new species, at Wooler.
- GIBBOSA, Bl. An adult male, top of Cheviot.
- APICATA, Bl. An adult male, Wooler.
- CORNUTA, Bl. An adult male, Wooler.
- BITUBERCULATA, Wider. Adults of both sexes, Wooler and Cold Martin Moss.
- EXCISA, Cambr. An adult male in the Berwickshire collection, and several of the same sex from the Wooler district.
- LIVIDA, Bl. Adults of both sexes from nearly all the localities, both in Berwickshire and in Northumberland.
- RUFA, Wider.=*N. rubripes*, Bl. An adult male at Wooler; another on the top of Hedgehope; and one on Cheviot Hill.
- VIARIA, Bl. An adult male and females, Humbleton Hill.
- SYLVATICA, Bl. Adult males, Langleyford; one on Hedgehope; another on Humbleton Hill; adults of both sexes, Wooler; and adult males in the Berwickshire collection.
- FUSCIPALPIS, C. Koch.=*N. gracilis*, Bl.=*N. flavipes*, Bl. Adults of both sexes, Wooler district and in the Berwickshire collection.

* Described (with others marked with an asterisk) in "Linn. Trans.," xxviii., pp. 523--555, pl. 46.

NERIENE SUBLIMIS, *sp. n.* The adult male of this Spider is one-tenth of an inch in length: it is of a slender form, and is nearly allied to *Erigone fuscipalpis*, C. Koch.=*N. gracilis*, Bl. It may, however, be readily distinguished by its larger size, the redder brown colouring of the legs, the slenderer form of the falces, and the structure of the palpal organs. The *cephalothorax*, falces, maxillæ, and labium are of a deep brown colour; the legs are long, slender, and of a yellow brown colour; the femora much the strongest, and strongly tinged with red; they are armed with hairs and a very few slender prominent spine-like bristles; and their relative length is 4, 1, 2, 3. The cubital joint is rather nodiform, with a longish, slightly sinuous bristle, directed forwards from its fore side. The *palpi* are short, the cubital and radial joints very short; the latter is rather the strongest, and has its outer extremity at the fore part produced into a short slight point (similar to that of *N. fuscipalpis*); the digital joint is of tolerable size and is somewhat angularly prominent towards its base on the outer side, resembling in this particular also the species before mentioned; the palpal organs are highly developed and complex, the corneous spines and processes less compact and more prominent than in *N. fuscipalpis*, two in particular may be noticed as giving a strong differential character from those of that species. One of these, situated towards the base of the palpal organs, projects prominently backwards and inwards, and has its extremity slightly curved and terminating in an obtuse, or squarish point: the other lying along the outer side has its fore extremity bifid or forked. The *abdomen* is small, oval, not very convex above; its colour is black, glossy, and clothed very sparingly with short hairs. The female is much larger than the male, measuring nearly two lines in length, but resembles that sex in general form and colour. The epigyne connected with the genital aperture is strong, prominent, and furnished at its extremity with a short, strong, closely recurved corneous process, or ovipositor.—An adult male and three adult females, top of Cheviot Hill.

CURTIPES, *sp. n.* The length of the adult male of this species is one line. The *cephalothorax* is short, but of ordinary general form: the caput

has the occipital region, which is furnished with a few hairs, rather elevated and rounded, and the ocular area a little prominent, very much resembling in these respects *Nerienne atra*, Bl. It is of a deep shining black-brown colour; and the clypeus is rather sharply impressed immediately below the eyes, but full, prominent, and rounded, at its lower part, its height exceeding half that of the facial space. The *eyes* are small, dark-coloured, and in the usual four pairs, or two transverse lines; they are rather obscure, and their exact relative position is difficult to be ascertained with certainty—those of the hind central pair appeared to be nearer to each other than each is to the hind lateral on its side; those of the fore central pair are near together, but not quite contiguous. The *legs* are short, and do not differ greatly in length, their relative length being 1, 4, 2, 3; they are slender, but the several joints are of tolerably uniform size: their colour is yellowish red brown, and they are furnished with hairs, and a few slender erect bristles. The *palpi* are short, and similar in colour to the legs; the cubital and radial joints are very short, and very nearly of equal length: the latter is the strongest, and does not appear to be furnished with any very marked projection or apophysis at its fore extremity, though the upper and outer sides of that part are slightly emarginate, leaving a small, prominent, obtuse point at the middle of the fore extremity; the digital joint is large and of a regular oval form; the palpal organs are compact and not very complex; a strong dark-brown spiny process curves closely round their inner margin from the outer side of their base to the fore part of their inner side, where it is met by the point of a slender filiform black spine, which issues from near their fore part on the outer side and runs over them, in close contact, in a directly transverse direction. The *falces* are moderately long, slender, and of a dark-brown colour; the inner surface towards the extremity is armed with a few fine teeth. The *maxillæ* and *labium* are of normal form, and similar in colour to the falces. The *sternum* is similar in colour to the cephalothorax, very convex, and furnished with some coarse prominent hairs. The *abdomen* is rather large and tolerably convex above; it does not project much over the base of the

cephalothorax, and it is of an obscure greenish-black colour, clothed thinly with short hairs, the epidermis having a semi-coriaceous and slightly punctuose appearance. — A single example only, Langleyford.

NERIENE *PAVITANS, Cambr., *sp. n.* An adult female, Cheviot Hill.

———*CLARA, Cambr., *sp. n.* An adult female, Cheviot Hill.

———*PRUDENS, Cambr., *sp. n.* An adult female, Cheviot Hill.

———*MORULA, Camb., *sp. n.* Male and female adult, Cheviot Hill.

Genus *Walckenaera*, Bl.

WALCKENAERA BREVIS, Wider. = *W. depressa*, Bl. An adult male in the Berwickshire collection.

———BREVIPES, Westr. An adult male, Cold Martin Moss.

———CUSPIDATA, Bl. Adult males, Wooler, South Middleton Dean, and Hedgehope; adults of both sexes in the Berwickshire collection.

———UNICORNIS, Cambr. Adult males, Cold Martin Moss.

———NUDIPALPIS, Westr. Adult male, Berwickshire collection.

———PUNCTATA, Bl. An adult male, Wooler; and adults of both sexes in the Berwickshire collection.

———BIFRONS, Bl. An adult male, Cheviot Hill.

———CRISTATA, Bl. Adult male, Wooler.

———ANTICA, Wider. Adult females, Old Earle and Wooler; an adult male, Hedgehope; an adult male in the Berwickshire collection; and an adult female, Langleyford.

———FUSCIPES, Bl. Adult males, Wooler; one at Humbleton Hill, and another in the Berwickshire collection.

———OBSCURA, Bl. An adult male, Wooler.

———LATIFRONS, Cambr. An adult male, Cheviot Hill.

———PERMIXTA, Cambr. Adult males, Wooler; adults of both sexes in the Berwickshire collection.

———NEMORALIS, Bl. An adult male, Wooler; and adults of same sex in the Berwickshire collection.

———LUDICRA, Cambr. An adult male, Pease Dean.

———*NODOSA, Cambr., *sp. n.* An adult male, Cold Martin Moss.

———TRIFRONS, Cambr. Adults of both sexes, Cheviot Hill and Langleyford.

WALCKENAERA FRONTATA, Bl. Adult male, Berwickshire collection; adult males, South Middleton dean and Wooler; and one on Cheviot Hill.

—— ACUMINATA, Bl. Adults of both sexes, Wooler district; a single adult male, Langleyford; one on Cheviot Hill, and another in the Berwickshire collection.

Genus *Pachygnatha*, Sund.

PACHYGNATHA CLERCKII, Sund. Adults of both sexes, Wooler, South Middleton dean, and Berwickshire collection.

—— DEGEERII, Sund. Adults of both sexes: Wooler, Langleyford, Hedgehope, and Berwickshire collection.

Genus *Tapinopa*, Westr.=*Linyphia*, Bl., *ad partem*.

TAPINOPE LONGIDENS, Bl. An adult female, Cheviot Hill.

—— UNICOLOR, *sp. n.* Adult female, length very nearly $2\frac{1}{2}$ lines. This Spider is nearly allied to *T. longidens*, resembling it in general form and structure, but easily distinguished by an almost total absence of pattern on the cephalothorax and a unicolorous abdomen, as well as by the slightly larger size and closer contiguity of the eyes of the fore central pair, and the generally rather closer grouping of the eyes. The colour of the cephalothorax, legs, and palpi is of a uniform yellow colour, the abdomen paler, and thinly clothed with dark curved hairs. The eyes of the fore central pair are distinctly the largest of the eight, and are separated by less than an eye's diameter, while the interval between those of the same pair in *T. longidens* is quite equal to, if not greater, than an eye's diameter. This certainly holds good in comparison of the females of the two species, but the fore central eyes of the male of *T. longidens* appear to be nearer together than those of the female, and so probably a similar difference between the sexes of *T. unicolor* will be found to exist when the male of this latter shall be discovered. The height of the clypeus also in *T. longidens* is greater than that of *T. unicolor*; in the latter species it does not exceed the diameter of one of the fore central eyes, while in *T. longidens* it exceeds it perceptibly. The *falces* are very similar in both species, being strong, prominent towards their base in front, divergent at

their extremities, and armed with long teeth on their inner margin. The *epigyne* connected with the genital aperture is also as nearly as possible alike in the two species.—An adult male, Pease Dean, and two others at Wooler.

Genus *Linyphia*, Latr.=*Linyphia*, Bl., *ad partem*.=*Neriène*, Bl., *ad partem*.=*Theridion*, Bl., *ad partem*.=*Bathypantes*, Menge, *ad partem*.

LINYPHIA FRENATA, Bl. An adult female, South Middleton dean.

—— THORACICA, Wider.=*L. cauta*, Bl. Adults of both sexes, Pease Dean and Langleyford; and adult males in the Berwickshire collection.

—— LEPROSA, Ohl.=*L. confusa*, Cambr. Adult females, Old Earle, Wooler, and Berwickshire collection; adults of both sexes, Cheviot Hill.

—— MINUTA, Bl. Adults of both sexes, Old Earle and Langleyford; and a single adult of each sex in the Berwickshire collection.

—— TENEBRICOLA, Wider.=*L. terricola*, Bl.=*L. tenuis*, Bl. Adult and immature examples of both sexes from all the various localities both in Northumberland and Berwickshire.

—— OBSCURA, Bl. An adult of each sex, Cheviot Hill.

—— VARIEGATA, Bl.=*Neriene variegata*, Bl. Adult male, Wooler, and another, Langleyford. An adult of each sex, Cheviot Hill; and adult females in the Berwickshire collection.

—— ALACRIS, Bl. Males and females, adult, Berwickshire collection and Pease Dean; adult females, Cheviot Hill and Wooler.

—— SOCIALIS, Sund. An adult of each sex, Wooler; an adult male, South Middleton dean.

—— LUTEOLA, Bl.=*L. alticeps*, Bl. Adults of both sexes; Langleyford, Wooler District. Cheviot Hill, and Berwickshire collection.

—— ALTICEPS, Sund. Adults of both sexes, Cheviot Hill; and an adult female in the Berwickshire collection.

—— CRISTATA, Menge.=*Bathypantes cristatus*, Menge. An adult male, Berwickshire collection; and adults of both sexes, Wooler district. Before the captures here recorded, this species had not been noted in Great Britain.

—— EXPLICATA, Cambr.=*L. decolor*, Cambr. An adult male and females, Old Earle.

—— NIGRINA, Westr.=*L. pulla*, Bl. Adult males and females, Berwickshire collection.

- LINYPHIA APPROXIMATA, Cambr. Adults of both sexes, Wooler and Berwickshire collection.
- DORSALIS, Wider. = L. anthracina, Bl. = L. Claytoniæ, Bl. Adults of both sexes; Hedgehope, Wooler, and other localities in the Wooler district.
- ERICÆA, Bl. Adults of both sexes, Langleyford, and an adult male in the Berwickshire collection.
- CIRCUMSPECTA, Bl. An adult male and females, Langleyford, and an adult male in the Berwickshire collection.
- ANGULIPALPIS, Westr. An adult male, Cheviot Hill. *New to Britain.*
- EXPERTA, Cambr. An adult male, Cold Martin Moss, and others on Cheviot Hill.
- RUFA, Westr. An adult female, Pease Dean; adults of both sexes, Hedgehope, Wooler, and in the Berwickshire collection. *New to Britain.*
- BICOLOR, Bl. = Neriene bicolor, Id. Adults of both sexes abundant in almost every locality, both in Northumberland and Berwickshire.
- *LINGUATA, Cambr., *sp. n.* An adult female in the Berwickshire collection.
- *RETICULATA, Cambr., *sp. n.* Adults of both sexes on the tops of Hedgehope and Cheviot Hill. It is somewhat remarkable that this fine and distinct species should have been discovered at a high altitude on a mountain in South Tyrol, and described under the name of *Erigone adipata*, by Dr. L. Koch, nearly about the same time as its discovery by Mr. Hardy and description by myself. The description, however, by Dr. Koch is rather later in point of time than my own.
- *PRUDENS, Cambr., *sp. n.* Adults of both sexes, Old Earle and Cheviot Hill; an adult of each sex, Wooler; and adult males and females, in the Berwickshire collection.
- *ARCANA, Cambr., *sp. n.* An adult male, Cheviot Hill.
- *CONTRITA, Cambr., *sp. n.* An adult male, Cheviot Hill.
- DECENS, Cambr. An adult female, Cheviot Hill.
- CONCOLOR, Wider. = Theridion filipes, Bl. Adult males, Wooler; and a single example of the same sex in the Berwickshire collection.
- INSIGNIS, Bl. Adults of both sexes; Wooler district, South Middleton Dean, and Berwickshire collection.

- LINYPHIA CLATHRATA, Sund.=Nerience marginata, Bl. Adults and immature examples of both sexes, Wooler district, and in the Berwickshire collection.
- BUCCULENTA, Clerck.=Nerience trilineata, Bl. An adult female, Oldcambus; adults of both sexes, Wooler district and Berwickshire collection.
- MONTANA, Clerck.=L. marginata, Bl. An adult and immature females, Wooler district; adults and immature examples of both sexes, South Middleton Dean.
- TRIANGULARIS, Clerck.=L. montana, Bl. Females adult and immature, Langleyford and several other localities.
- PELTATA, Wid.=L. rubea, Bl. Immature females, Wooler district.
- PUSILLA, Sund.=L. fuliginea, Bl. An adult male and females, Wooler, and immature examples of both sexes in several other localities.
- HORTENSIS, Sund.=L. pratensis, Bl. Immature examples of both sexes, Wooler district.

Genus *Ero*, C. Koch.=Theridion, Bl., *ad partem*.

- ERO THORACICA, Wider.=Theridion variegatum, Bl. Adult females, Wooler; and adult males, Cold Martin Moss.

Fam. EPEIRIDES.

Genus *Meta*, C. Koch.=Epeira, Bl., *ad partem*.

- META SEGMENTATA, Clerck.=Epeira inclinata, Bl.=E. Mengii, Bl. Adults and immature examples of both sexes from nearly all the localities both in Berwickshire and Northumberland.
- MERIANÆ, Scop.=E. antriada, Bl.=E. celata, Id. Adult and immature males and females; Cheviot Hill, Wooler district, and Berwickshire collection.

Genus *Tetragnatha*, Latr.

- TETRAGNATHA EXTENSA, Linn. Immature examples of both sexes; South Middleton Dean, Wooler district, and Berwickshire collection.

Genus *Cercidia*, Thor.=Epeira, Bl., *ad partem*.

- CERCIDIA PROMINENS, Westr.=Epeira bella, Meade and Bl. An adult male and female, Berwickshire collection.

Genus *Zilla*, C. Koch.=*Epeira*, Bl., *ad partem*.

ZILLA 4-NOTATA, Clerck.=*Epeira* similis, Bl. Adult and immature females, Wooler district.

——— *ATRICA*, C. Koch.=*E. calophylla*, Bl. An adult male and female, Wooler; adult males, Cold Martin Moss.

Genus *Epeira*, Walck.=*Epeira*, Bl., *ad partem*.

EPEIRA CUCURBITINA, Clerck. An adult male and females, Wooler district.

——— *DIADEMATA*, Clerck.=*E. diadema*, Bl. Adult males, Wooler district; immature examples of both sexes in several other localities in Northumberland and Berwickshire.

——— *CORNUTA*, Clerck.=*E. apoclista*, Bl. Adults of both sexes, Wooler district.

——— *UMBRATICA*, Clerck. Adult females, Langleyford.

Fam. THOMISIDES.

Genus *Xysticus*, C. Koch.=*Thomisus*, Bl., *ad partem*.

XYSTICUS CRISTATUS, Clerck. An adult male and females, Langleyford; immature examples of both sexes in several other localities in Berwickshire and Northumberland.

——— *VIATICUS*, Clerck. An adult female, Wooler, and another, South Middleton Dean.

——— *LANIO*, C. Koch. An adult female, Cheviot Hill.

——— *ERRATICUS*, Bl. An adult female, Langleyford.

——— *ATOMARIUS*, Panzer.=*T. versutus*, Bl. An adult female, Cold Martin Moss.

——— *TRUX*, Bl. Adult males and female, Cold Martin Moss; and adult females, Wooler and South Middleton Dean.

——— *HORTICOLA*, Panz.=*Thomisus pallidus*, Bl. An adult female, South Middleton Dean.

Genus *Philodromus*, Walck.

PHILODROMUS CESPITICOLIS, Walck. Males and females, adult and immature, Wooler district.

Genus *Thanatus*, C. Koch.=*Philodromus*, Bl., *ad partem*.

THANATUS OBLONGUS, Walck. Adults of both sexes, Cold Martin Moss; and adult females in the Berwickshire collection.

Fam. LYCOSIDES.

Genus *Pirata*, Sund.=*Lycosa*, Bl., *ad partem*.

PIRATA PIRATICUS, Clerck.=*Lycosa piratica*, Bl. An adult female, Wooler; another on Cheviot Hill; and an adult of each sex, Cold Martin Moss.

Genus *Trochosa*, C. Koch.=*Lycosa*, Bl., *ad partem*.

TROCHOSA CINEREA, Fabr.=*Lycosa allodroma*, Bl. An adult male and an immature female, Wooler.

—— PICTA, Hahn. Adults of both sexes, Wooler district.

—— RURICOLA, De Geer.=*L. campestris*, Bl. Adults of both sexes, Wooler district.

—— TERRICOLA, Thor.=*L. agretyca*, Bl. An adult female, Oldcambus; an adult male, Old Earle; and a male and females, adult, Wooler district.

Genus *Lycosa*, Latr.=*Lycosa*, Bl., *ad partem*.

LYCOSA AMENTATA, Clerck.=*L. saccata*, Bl. Adults and immature examples of both sexes, South Middleton Dean, Wooler district, Cheviot Hill, Langleyford, and Berwickshire collection.

—— PULLATA, Clerck.=*L. obscura*, Bl. An adult male, Cold Martin Moss; another on Cheviot Hill; and a male and female, adult, Wooler district.

—— NIGRICEPS, Thor.=*L. congener*, Cambr. Females, adult and immature, South Middleton Dean; and an adult male, Wooler.

—— HERBIGRADA, Bl. An adult male, Wooler.

—— MONTICOLA, Clerck. Females, adult and immature, Wooler and Cheviot Hill.

—— PALUSTRIS, Linn.=*L. exigua*, Bl. Immature examples of both sexes of what I believe to be this species, in various localities both in Northumberland and Berwickshire.

Genus *Tarentula*, Sund.=*Lycosa*, Bl., *ad partem*.

TARENTULA PULVERULENTA, Clerck.=*L. rapax*, Bl. Immature examples of both sexes; Old Earle, Cold Martin Moss, Hedgehope, and Berwickshire collection.

—— ANDRENIVORA, Walck. An adult male, Cold Martin Moss, another Langleyford, and an adult female, Wooler.

Fam. SALTICIDES.

Genus *Epiblemum*, Hentz.=*Salticus*, Bl., *ad partem*.

EPIBLEMUM SCENICUM, Clerck.=*S. scenicus*, Bl., *ad partem*.

An adult of each sex, Berwickshire collection.

——— CINGULATUM, Panz.=*S. scenicus*, Bl., *ad partem*

Two adult males, Wooler.

Genus *Attus*, Walck.=*Salticus*, Bl., *ad partem*.

ATTUS FALCATUS, Clerck.=*S. coronatus*, Bl. An adult of each sex, Wooler.

ORDER PHALANGIDEA.

Fam. PHALANGIDES.

Genus *Nemastoma*.

NEMASTOMA BIMACULATA. A single example in Berwickshire collection.

——— CHRYSOMELAS. Two examples, Cheviot Hill.

[In the Club's "Proceedings," Vol. v., pp. 92-96 (1858), will be found a list of seventy Berwickshire Spiders, of which eight are not in the present enumeration, viz. (I use the amended nomenclature): *Drassus sylvestris*, Bl., *D. cupreus*, Bl., *Agroeca brunnea*, Bl., *Clubiona brevipes*, Bl., *Walckenaera Hardii*, Bl., *W. obtusa*, Bl., *W. pumila*, Bl., and *Xysticus cinereus*, Bl. These make the number on the Border list, 168. In addition to these, that earlier list furnishes for Berwickshire twenty-two other Spiders, not recorded in the present for that district, viz.: *Micaria pulicaria*, *Prothesima Petiverii*, *Clubiona fusca**, *Dictyna arundinacea*, *Tegenaria Derhamii*, *Phyllonethis lineata*, *Nerience rubens*, *N. rufa*, *Tapinopa longidens*, *Linyphia socialis*, *L. montana*, *L. triangularis*, *L. peltata*, *L. hortensis*, *Ero thoracica*, *Xysticus trux*, *X. atomarius*, *X. horticola*, *Trochosa picta*, *T. pullata*, and *Attus falcatus*. These make the ascertained Berwickshire Spiders 105, as against 145 from North Northumberland.—J. H.]

* I know of no such British or other species. May it be *C. fucata*, Bl., which is = *C. courta*, Koch—the latter name having priority. See "British and Irish Spiders," by J. Blackwall.—O. P. C.

On Berwickshire Insects. No. III. By JAMES HARDY.

I HAVE had very little leisure this season to devote to Insects in Berwickshire, a portion of three days being all the time I could spare; my object being to pick up some of the Saw-flies while they were prevalent, the period of their occurrence being very ephemeral. Those I was unacquainted with were submitted to Mr. Cameron, of Glasgow, who knows more about the Tenthredinidæ than any other British naturalist; and he also examined the more select Cheviot species of this little studied family, and I owe to him some of the synonyms. Others there were that I had previously in my collection.

COLEOPTERA.

ORCHESTES SCUTELLARIS. In June I noticed considerable numbers on alders, of a very pale colour as if newly hatched, on the Tower burn, near the Pease Mill.

SITONES LINEATUS, AND THE BEAN *APHIS*. The *Sitones* were very prevalent in bean-fields throughout the season. They appeared in crowds upon the walls along the sea-banks, in calm days, about the 21st April, evidently an immigrant association; and, shortly after, the fields were occupied by them, and the leaves of the young plants were nibbled on the edges, and assumed a pinched appearance. The *Sitones* did much to keep the crop back; the beans were sown on a dry bed, and never had a shower to promote the vigorous growth adequate to shake off the effects of insect attacks. While thus languishing, they were overspread by the black *Aphis Rumicis*, to a degree that I never saw equalled. The plants, covered by them as if with gunpowder, became also black, and withered away in patches. The evil symptoms soon became apparent without need of a close examination, by tokens of untimely ripeness breaking out in spots among the healthy plants that still continued clean and robust. The Aphides were attacked by *Syrphus* larvæ; and *Coccinella septempunctata* and its larva were far beyond their legitimate numbers, but without apparently diminishing the Aphid swarms, which also covered, with a loathsome crust, thistles, docks, and almost all sorts of weeds. A solitary Lap-wing frequented one field for about three months, from May to July, the abundance of food overcoming its gregarious propensities. Altogether, the bean crops along the coast were either deficient or failures.

HYMENOPTERA.

TENTHREDINIDÆ (SAW-FLIES).

CIMBEX FEMORATA, L. Near Ayton. In former years I took it in numbers about Swinton Hill.

HYLOTOMA USTULATA, *L.* Frequent about Swinton Hill.

CLADIUS PADI, *L.* Near Penmanshiel.

NEMATUS DEGEERI, *Klug.* On birch near Penmanshiel, on June 5th; scarce there. Mr. Cameron has written its history, "Scottish Naturalist," ii., p. 113, &c.

„ PAPILLOSUS, *Retz.*=MYOSOTIDIS, *F.* Marshy sea-banks, Oldcambus.

„ KIRBYI, *Dalb.* In damp and marshy ground, Oldcambus and Penmanshiel.

„ OBDUCTUS, *Hartig.* One on sea-banks among grass, Oldcambus, June. Mr. Cameron obtained it at Rannoch in June; and also near Glasgow.

„ VIRESCENS, *Hartig.* I bred a number from pupæ dug from decayed wood of salallows, and from old birch stumps near the salallows where the caterpillars had fed; Red Clues Cleugh near Penmanshiel.

PHYLLOTOMA VAGANS, *Fall.*=MELANOPYGA, *Klug.* One among birch trees, Penmanshiel. Mr. Cameron found it in Rannoch.

ATHALIA ROSÆ, *L.* I noted this species this year both to be early in its advent and also late in disappearing. The first were observed on the sea-banks, resting on walls, April 21st; the latest, October 15th. The adjoining fields were much infested with wild mustard, which may have formed the inducement to its presence there. Mr. Cameron has given its history, "Scottish Naturalist," ii., p. 197.

„ SPINARUM, *Fab.* I am not acquainted either with the larva or imago of this species, but it has occurred, in former years, on this place. In 1859 some acres of turnips at Oldcambus were destroyed by the "black caterpillar," and in July of that year it was becoming very hurtful on the Tower farm, where gas-lime was applied to effect a cure. At Hutton Hall Barns, also, several acres were lost by its ravages. Quicklime was employed as a deterrent.

SELANDRIA MELANOCEPHALA, *Hartig.*=SALICIS, *D. G. nec L.* Bred from willows.

HEMICHROA ALNI, *L.* A single example beaten from a birch, at Penmanshiel. Rare.

ALLANTUS ARCUATUS, *Forst.* On umbelliferous plants, everywhere.

„ CINCTUS, *Pz.* Oldcambus, Howpark wood, Swinton Hill.

PERINEURA NASSATA, *L.* Oldcambus, June.

TENTHREDO LIVIDA, *L.* Trees, Oldcambus and Penmanshiel; also the black variety.

„ ATRA, *L.* On birches, Penmanshiel.

„ MESOMELA, *L.*=VIRIDIS, *Klug.* Among grass and hazel and willow bushes, Oldcambus.

TENTHREDO PAVIDA, *Fab.* Oldcambus and Penmanshiel. In July, 1866, I observed the female depositing its eggs on the leaves of *Ranunculus acris*.

„ *DIMIDIATA*, *Fab.* On birch, Penmanshiel.

„ *LATERALIS*, *Fab.* Two on grass on the moor between Penmanshiel and Oldcambus.

„ *BALTEATA*, *Klug.* On birch at Penmanshiel.

PACHYPROTASIS RAPÆ, *L.* Penmanshiel, Oldcambus, and Tower dean; on trees.

STRONGYLOGASTER CINGULATUS, *Fab.* Sea-banks at Oldcambus, and again at Penmanshiel.

PÆCILOSOMA PULVERATUM, *Retz.* Only a single example, on alder near Penmanshiel, in June.

DOLERUS CORACINUS, *Klug.* Oldcambus.

SIREX GIGAS, *L.* Mr. W. Shaw has sent me a very fine specimen, captured near Ayton. It may have originated from foreign timber. When recording the example obtained at Langleyford, I had not remarked that Mr. Selby had formerly obtained one from Warenford. See Club's "Hist.," vol. iii., p. 96.

ACULEATA.

BOMBUS LAPIDARIUS. I fell in with a strong "bike" of the red-tailed "Bummie," in summer, under the floor of an outhouse, to which it gained admittance under the door. I did not pay attention to the autumnal diminution of their numbers till October 21, when they were reduced to two small queens and a single worker. The queens were up early and carrying; but the worker had crawled out of doors in a drowsy, dying state. Being replaced in its hole, it revived, and issued forth merrily; but next day it was torpid as before, as well as one of the queens. I restored both to their nest, but did not observe any after the 23rd.

HEMIPTERA-HOMOPTERA.

PHYLLAPHIS FAGI, *L.* Mr. Stevenson brought examples of this cottony-covered Aphis to the Foulden meeting, found near Dunse.

HYALOPTERUS ARUNDINIS, *Fab.* I noticed several colonies on leaves of *Arundo Phragmitis* on the Tweed, in September, 1873.

DIPTERA.

NEMOTELUS NIGRINUS, *Fall.* Tower dean; and also at Penmanshiel.

OXYCERA MUSCARIA, *Fab.* In Tower dean, above the Pease mill, resting on alders; apparently both flies are unrecorded as Scottish.

Localities for some Border Plants. By ANDREW KELLY.

RUMEX ALPINUS. Among the lonely glades of the East Water, Lauderdale.

MYRICA GALE. Borthwick Shiels. Dwarfish straggling bushes, now and then inclining to a thicket. I have sought for this plant in the high Lammermoors as yet in vain.

UTRICULARIA VULGARIS. In the autumn of 1870, I found great quantities of this curious aquatic drifted to the water edge, at the loch at Newhouses, Hawick. The metamorphosed leaves attached to the roots had singularly large bladders, but not one of them contained insects.

MILIUM EFFUSUM. In moist, shady woods, Thirlestane Castle, and Blackadder woods; not rare. This grass has such a bold and striking character, that when once known, it can never be mistaken, even at a distance. It is of a bright apple green colour in summer, and in winter pales down to a straw colour.

CAREX PALUDOSA. Moist banks below Allanton Bridge.

„ RIPARIA. In the same locality, abundant. The fertile spikelets are perfectly black, angular, and pointed, thus distinguishing them effectually from those of *paludosa*, which are very obtuse. I see, too, that the upper spikelet is the only one that flowers out; the others flowering only at or about the middle, the black sharp points being left barren.

OSMUNDA REGALIS. Moist, boggy spot at the side of a natural wood, near Spottiswood; rare. [This is now the only Berwickshire locality, the Coldingham moor plant having been taken away.]

List of Plants found at various dates. By J. A. ERSKINE STUART, Chirnside.

ACONITUM NAPELLUS. In a wood below Ale Mill; Aug., 1874.

SAGINA NODOSA. Ale Water, below Bee-edge; Aug., 1874.

SEDUM TELEPHIUM. Side of burn at Burnhouses; April, 1873.

VIBURNUM OPULUS. Ale Water, below Bee-edge; Aug., 1874.

CALAMINTHA CLINOPODIUM. Banks of Ale Water below Ale Mill; Aug., 1874.

PLANTAGO MARITIMA. On Ale Water several miles from sea-coast; Aug., 1874.

ASPLENIUM TRICHOMANES. In great beauty on the Ale Water below Bee-edge. Some of the fronds were about a foot in length. Aug., 1874.

SCOLOPENDRIUM VULGARE. Near Chirnside this has within the last few years been picked in many places. It has been found in wells at Hutton Hall and Foulden West Mains; also, on walls at Maines, Easter Harelaw, Whitehall, Blackadder, and Chirnside Bridge.

Contributions to the Entomology of the Cheviot Hills.
No. V. By JAMES HARDY.

MY collection of Insects in the Cheviot district, when I visited it in the beginning of June, consisted principally of Saw-flies. Although there were only six collecting days, and some of them windy and chill, and the yield consequently appeared insignificant, several new insects to the district were secured; along with others never before seen on the same well-searched tracts. In some localities, such as Yeavering wood, insects were very scarce. I was probably too early for high lying places exposed to the north.

COLEOPTERA.

CARABUS NEMORALIS, *Mull.* This is common among stones on the dry slopes of the Sneer hill, facing Langleyford vale; also near Earle Mill.

OLISTOPHUS ROTUNDATUS, *Payk.* I have seldom seen this moorland beetle more abundant than under small stones at the top of Newton Tor, where it associated with the hill *Bradycelli*.

PTEROSTICHUS ORINOMUS, *Steph.* Several at the top of Newton Tor. It hybernates, like the *Carabi*, in an oval cell under stones at the tops of Cheviot and Hedgehope.

LATHROBIUM MULTIPUNCTATUM, *Grav.* One in ant's nest, at the foot of Watch Law, Common Burn.

MYCETOPHAGUS MULTIPUNCTATUS, *Fab.* One by sweeping, side of Harthope burn, near Langleyford meadows.

MELOLONTHA VULGARIS, *Fab.* I never till this season saw the Cockchafer in North Northumberland, although Mr. Selby records it for Twizell. There were only five or six examples altogether on different days, which I beat from oaks in the wood above Caldgate Mill, and again in Middleton wood, which lies further up on the south bank of Wooler Water. Nor did I ever find it abundant at Gibside, where the climate is more genial. It still holds true, as in the time of Wallis, that "we have few chafers, even in the hottest summers; seldom more than a pair being seen at a time." ("Hist. Northd.," i., p. 365). A few have been taken about Chirnside, in Berwickshire. June.

PHYLLOPERTHA HORTICOLA, *L.* I was glad also to welcome this small gay-coloured chafer—"the Bracken-Clock," so abundant about Gibside and by the Derwent—to the borders of the Wooler Water, where it occurred on the trees and bushes on both the Middleton Hall and Middleton sides, and followed up Old Middleton dean to the top. It has been recorded for Holy Island, Twizell, and the river Glen. June.

ATHOUS VITTATUS, Fab. I observed this just emerged from the pupa state, under a stone near the junction of Broadstruther and Common burns. Many other *Elaters* may be found in this condition in the bogs on the moors.

MELANOTUS FULVIPES, Herbst. I dug nearly a dozen perfect insects from a decayed alder, opposite Middleton Hall ground, on the south side of the water, where I had previously noticed the larva. This is new to Northumberland, and the Gateshead locality still remains the only one for Durham. "Catalogue of the Insects of Northumberland and Durham," p. 150. There I found it in oaks, ashes, and willows.

TELEPHORUS ABDOMINALIS, Fab. This fine insect was seen in several localities: Lillburn, at South Middleton dean; Middleton Hall wood; Langlee wood.

„ *RUSTICUS, Fall.* Old Middleton wood.

„ *CLYPEATUS, Id.* Old Middleton wood.

SALPINGUS AERATUS, Muls. Old Middleton wood.

APODERUS CORYLI, L. I found two of this very rare insect on hazel in Yeavinger wood. Several of the bundles in which it deposits its eggs were attached to the foliage, being portions of the leaves loosely wrapped. It is unrecorded for Northumberland. I have only met with it, long ago, in Penmanshiel wood, before the hazels were thinned out of it. The specimen long stood in Dr. Johnston's collection.

RYNCHITES NANUS, Payk. One on a willow in Middleton Hall lower wood. It is more frequent in Berwickshire.

„ *ZENEUVIRENS, Marsh.* I found a large family of this local species feeding on the buds and young leaves of oak, in Old Middleton wood, where I had previously beat it out of hazel, on which it had probably dropped from the oaks above.

MAGDALINUS CARBONARIUS, L. I obtained a considerable number of specimens from birch, in several spots above Langleyford. It prefers the skirts of the wood. There is a great variety in size.

CÆLIODES GERANII, Park. On *Geranium sylvaticum*, Middleton Hall lower wood,

ORCHESTES SCUTELLARIS, Fab. In Yeavinger wood, on alder, where I originally found it; also above Langleyford.

TACHYERGES SALICIS, L. Yeavinger wood.

LIOPUS NEBULOSUS, L. Middleton Hall lower wood.

CHRYSOMELA FASTUOSA, L. This brilliant insect is common in Berwickshire; but hitherto Twizell is the only recorded locality for Northumberland. This year I found it on *Lamium album* in a lane in the field called Gamesley, at the top of the town of Wooler.

ADIMONIA CRATAEGI, Forst. This has hitherto only been noticed at Twizell. This year it occurred among hawthorn all along

the banks of the Wooler Water, from Careburn Bridge to Caldgate Mill.

GALERUCA TENELLA, *L.* Among dwarf *Salix aurita* in an open glade above Langleyford, accompanied by *Adimonia Capreæ*.

HYMENOPTERA.

TENTHREDINIDÆ.

TRICHIOSOMA LUCORUM, *L.* On birch in Yeavinger wood.

HYLOTOMA USTULATA, *L.* Again at Langleyford, in June, on leaves of birch.

NEMATUS DEGEERI, *Klug.* Very common on birch above Langleyford. [This ranks as a species of *Dineura*.]

„ *PAPILLOSUS*, *Retz.* On grass, Caldgate Mill; and near Langleyford by the side of Harthope burn.

„ *KIRBYI*, *Dbm.* On grass, Yeavinger wood and haugh near Old Middleton wood.

„ *VENTRALIS*, *Pz.* = *ABDOMINALIS*, *Fall.* On alders at Yeavinger wood. Mr. Cameron found this at Rannoch in the same month.

„ *LUTEUS*, *Fab.* On alders at Lillburn, at South Middleton dean; near Middleton Hall lower wood; below Caldgate Mill; Yeavinger wood; Langleyford.

„ *RUMICIS*, *Fall.* = *CAPREÆ*, *Hartig.* Old Middleton wood, by the water-side.

„ *SALICETI*, *Fall.*, var. *MUCRONATUS*, *Hartig.* Hovering about *Salix aurita*, above Langleyford.

„ *HISTRIO*, *St. Farg.* = *RUFESCENS*, *Hartig.* One example of this fine species beat from *Salix aquatica* at the side of Harthope burn, in Langleyford meadows. According to Mr. Cameron, the larva feeds on *Salix fragilis*.

DINEURA STILATA, *Klug.* At Langleyford and Old Middleton wood. Mr. Cameron records it for the first time as British in "Entomologists' Monthly Magazine" for August, p. 65. He found it on *Pyrus aucuparia*.

„ *TESTACEIPES*, *Kl.* At Langleyford among hazels, birches, or willows; two examples. See "Ent. Mon. Mag.," xi, p. 251.

CRÆSUS SEPTENTRIONALIS, *L.* One example, hovering about young alders at the side of Wooler Water, in Middleton Hall lower wood. A very fine and curious insect.

ATHALIA ROSÆ, *L.* Old Middleton wood.

BLENNOCAMPA FUSCIPENNIS, *Fall.* = *LUTEIVENTRIS*, *Klug.* Langleyford.

„ *PUSILLA*, *Klug.* Old Middleton wood.

SELANDRIA SERVA, *Fab.* On alders in Middleton Hall lower wood.

HEMICHROA LURIDIVENTRIS, *Fall.* Numbers of the perfect insects appeared this year among alders on the Lill burn; near Old Middleton wood; and at Langleyford.

MACROPHYA ALBICINCTA, *Klug.* Bottoms of woods, Old Middleton wood and Langleyford.

TENTHREDO RUFIVENTRIS, *Fab.* From alder on the Lill burn; and Old Middleton wood at the water-side.

„ *PAVIDA*, *Fab.* Langleyford.

„ *ATRA*, *L.* Birches and hawthorn, Langleyford and Old Middleton dean.

„ *SOLITARIA*, *Fall.*=*AUCUPARLÆ*, *F.* A pair at the foot of Old Middleton wood.

PACHYPROTASIS SIMULANS, *Klug.* Above Langleyford.

STRONGYLOGASTER CINGULATUS, *Fab.* Beat from alders on the Lill burn, and on Middleton banks among hawthorns. A single male occurred, that sex being rare. The food of the caterpillar is *Pteris aquilina*.

„ *MIXTUS*, *Klug.* Beat out of alder, Langleyford; and also on the Lill burn.

PECILOSOMA PULVERATUM, *Retz.* Beat out of alder in abundance on the Lill burn, at Middleton Hall lower woods, and Langleyford.

DOSYTHEUS TIMIDUS, *Klug.* Side of the loch at Holy Island. I place it here that it may not be forgotten.

DOLERUS CORACINUS, *Klug.* On the Lill burn.

„ *GONAGER*, *Fab.* Old Middleton wood.

„ *VESTIGIALIS*, *Klug.* From alders on the upper Lill burn.

LYDA SYLVATICA, *L.* From alders on the Lill burn; also below Caldgate Mill.

„ *DEPRESSA*, *Klug.* On alders and oaks; Old Middleton wood; Lill burn; among wild roses, Langlee.

ACULEATA.

VESPA VULGARIS, *L.* Being on the top of Hedgehope, September 16, I observed a very large female wasp seeking for its hiding-place among the stones that form the cairn at the apex, which is probably the barrow of some old British chieftain. It is singular that it should select the most bleak position in Northumberland for a hybernaculum. There is no danger of mice devouring it there, and its sleep would be profound and lasting; and perhaps these are advantages even to a wasp.

BOMBUS SENILIS, *Fab.* In the meadow below Old Middleton Wood; a very fine example.

HEMIPTERA HETEROPTERA.

ACANTHOSOMA PICTUM, *Newm.* Another example was found in June on the same birch that furnished one last year at Yeaver-
ing wood. I also found it at Penmanshiel in June.

LAMPROPLAX PICEUS, *Flor.*=*L. SHARPI*, *Doug. and Scott.* See "Ent. Mo. Mag.," xi, p. 184. Sides of Wooler Water above Earle Mill.

MACROCOLEUS HARDYI, *Bold*, "Nat. Hist. Trans. Northumberland and Durham," iv., p. 358 (1872).=*M. MOLLICULUS*, *Fall*. The specimens were only the last, in very fine condition. Douglas and Scott, *ib.* p. 185. From Tansy on the river Glen near Coupland.

DERÆOCORIS FORNICATUS, *Doug. and Scott*. "Brit. Hemipt.," 329, sp. 11. Mr. Scott in "Ent. Mo. Mag.," xi., p. 117, inserts a note signifying that owing to some specimens "sent by the late Mr. T. J. Bold, and taken, I believe, by Mr. Hardy on or in the neighbourhood of the Cheviots, I have been enabled to satisfy myself that the above insect is merely a northern form of *D. striatellus*. The series consisted of the reddish-yellow type form, with all intermediate varieties. It will be necessary, therefore, to refer the name as a synonym to *D. striatellus*." The specimens referred to were beaten from oaks in Old Middleton wood.

ORTHOSTIRA MACROPHTHALMA, *Fieb*. This is described by Messrs. Douglas and Scott in "Ent. Mo. Mag.," xi., p. 173, from a single undeveloped example, which has already appeared in the Cheviot list, first, as *O. cervina*, and second, as *O. nigrina*, with neither of which it agrees. Taken in August, 1871, among moors on the top of Cheviot, and not Cold Martin Moss as I had at first supposed.

SALDA VESTITA, *Douglas*. This species was recorded last year. Mr. Douglas describes it in "Ent. Mo. Mag.," xi., p. 11. He refers it mistakingly to the Tyneside district; it being taken on the Wooler Water, and the Glen near Coupland.

HEMIPTERA HOMOPTERA.

STRONGYLOCEPHALUS MEGERLEI, *Fieb*. Mr. Scott describes this in "Ent. Mo. Mag.," xi., p. 122, from two specimens sent to him by my late friend, Mr. T. J. Bold. It so happens that Mr. Bold sent to Mr. Scott for determination an *Acocephalus*, which is recorded in our lists as *sp. incog.*, in 1871, Vol. vi., p. 263. As this has not been reported on, I take it for granted that there is every likelihood that these are the specimens Mr. Scott has described, which, owing to Mr. Scott's absence in Spain, had lain unexamined till recently. The new genus is founded on *Acocephalus*. If I am correct, the insect was collected on some of the porphyritic hills near Wooler.

TRIECPHORA SANGUINOLENTA, *L*. Of this rare and brightly-painted insect, I took one among grass and ferns at the bottom of Old Middleton wood. It has a powerful flight, and its size and colouring led me, at the first glance, to imagine that it was a Burnet Moth. After I had secured it, it was constantly attempting to get out of the bottle, like all its kind. I saw another in a bog farther up, but its motions were too rapid to

permit of capture. I have another example, which Mr. Hislop took in the west of Berwickshire. This fine insect is not recorded in any of Mr. Bold's lists as Northumbrian, but may occur in some of the older Newcastle collections.

APHIDÆ.

SIPHONOPHORA PELARGONII, *Kalt.* On Mallows by the side of the Brewery road, Wooler; wingless and winged females.

PHORODON HUMULI, *Schrank.* Most abundant on Sloe-thorn at sides of the haugh Old Middleton wood.

APHIS DILINEATA, *Buckton.* On the Moss-rose in a garden at Wooler, both the wingless and winged females. This is an undescribed species, and is named from the double dorsal green stripes.

„ PADI, *L.* Abundant on the Bird Cherry in South Middleton dean; also in Middleton Hall lower wood, where it also frequents the *Viburnum Opulus*, after deserting its first food plant.

„ LYCHNIDIS, *L.* Very abundant on *Lychnis diurna*, near Caldgate Mill.

LACHNUS JUNIPERI, *Fab.* Very abundant on Junipers on the dry Middleton banks, and still more so on those equally dry on Ilderton moor, on the south side of the Lill-burn. There were wingless and winged females present. Vast numbers of Ants (*Formica fusca*) attended some of the bushes, for sake of the honey-dew. Others swarmed with *Bibio Johannis*, *B. Marci*, and other species. Kaltenbach says he never found this species on naked heights or exposed plains; it usually affects warm, damp places. This is quite contrary to my experience. In Berwickshire, where it also occurs, the Junipers grow on the driest banks, and are rarely sheltered.

TRAMA FORMICARIA, *Kalt.* In ant's nests at the root of *Holcus mollis* at the side of a ditch, in a bog near Newton Tor; again at the roots of *Anthoxanthum odoratum* and *Carex dioica*, at the base of Watch Law; along with *Formica umbrata*; and very abundant in nests of *Formica fusca*, at the roots of *Festuca*, in a plantation on Whiteside Hill. I believe there is another white species along with it at Watch Law, but the specimens were too juvenile. The ants usually scamper off and leave the Aphides to their fate, especially the *fusca*. The *umbrata* several times laid hold of them to transport them out of view, as it would do to its own cocoons. The open spaces in the runs of the ants permit freedom to the Aphids to multiply, and to procure its food most readily. The ants and Aphids are associated on terms of mutual accommodation.

„ RADICIS, *Kalt.* This is a white somewhat globular Aphis, surrounded with much cottony exudation. Mr. Buckton, who examined it, says, "it has a long proboscis, but not so long as

Kaltenbach's specimens." It was abundant in little patches at the roots of *Poa pratensis* under flat sandstones, in a wood on Whiteside Hill, in June.

FORDA MARGINATA, *Koch*. This is a yellow Aphis, drawn out at the two extremities, and is also surrounded by a cottony exudation. Found at roots of *Poa annua*, on earth-coped stone walls on the road-side near Cold Martin Moss. Not recorded as British.

COCCIDÆ.

LECANIUM BETULÆ, *L*. On twigs of birch at Broadstruther wood, and also at Penmanshiel.

„ ALNI, *Modeer*. This brown scale closely resembles the preceding. On twigs of alder at the Lill-burn.

„ CAPRÆ, *L?* By this I intend a small white mussel-shaped scale, abundant on the trunks and twigs of all our grey sallows, both in Berwickshire and in the Cheviots. In the present state of science we can only record *Coccidæ* from the trees or plants they frequent; hence this may have another name than I have assigned to it.

COCCUS THYMI, *Schrank?* There is a minute species, accompanied by a white exudation, at the roots of *Thymus Serpyllum*, at the base of Watch Law, near the junction of Common and Broadstruther burns. It was too immature for preservation.

DIPTERA.

BERIS VALLATA, *Forster*. Foliage of trees, Old Middleton wood.

Obituary Notice of George Ralph Tate, M.D., F.L.S.

GEORGE RALPH TATE, M.D., born at Alnwick, March 27th, 1835, was the eldest son of the late George Tate, F.G.S. He received his education at the Grammar School, Alnwick. Even when a boy he was very studious, and a constant companion of his father, into whose scientific pursuits he entered with the freshness of youthful ardour, more especially in the branches of Botany and Conchology. The former engaged his special attention, and in the end became to him more a pleasure than a study. When quite a boy his knowledge of the plants in the neighbourhood of his native town was very extensive.

In 1850, he entered the Edinburgh University as a student of Medicine, and when there was always regular and studious. His proficiency in the literary department favourably impressed the different professors whom he attended. In the Medical classes he took the gold medal for botany in 1853, and was for some time "dresser" to Professor Syme, and also to Dr. Dunsmure. He passed successfully his examination for surgeon's degree in 1855, and was then fully prepared for the examination for M.D.; but being only nineteen, he was under age. A letter written at that period, by one well acquainted with him, congratulates his father upon the honourable position in which his son was placed, on his passing his examination as a surgeon: "It is no more than what I expected, from the many opportunities I had, both privately and practically, of estimating the extent and soundness of his views. His upright character has always elicited my warmest admiration, and I am confident he will be as much respected for his moral worth, as I trust he will be for his professional." Dr. Johnston also expressed his conviction that he was destined to an honourable career: "There is no doubt of the well-doing of your son. He has the right look, and feeling, and talent—and he *cannot* go wrong."

Fortunately at the time of his attaining the surgeon's degree, there was a vacancy in the office of house-surgeon to the Alnwick Infirmary, for which he applied; and was successful in getting the appointment, remaining in it until 1858. When thus engaged, becoming of full age, he went to Edinburgh for the degree of M.D. His leaving the Infirmary was very much regretted. He had gained the respect and esteem of all classes, and more especially the patients, who greatly felt his loss. As a parting testimonial they presented him with a gold watch on his departure to enter the army. This he did in 1858, as assistant-surgeon in the Royal Artillery. In this capacity he was moved about to many different stations, both in England and Ireland; but he was never in any active service. He was in Hong Kong two years, having gone out with his brigade in 1862. His letters and diaries describing Chinese scenery, manners, and customs, are interesting. He also studied the botany of Hong Kong, and made a collection of plants in the province of Shantung, of which the botany is almost unknown. These are contained in the national collection at Kew, and

when the flora of China is written, will be a valuable contribution towards it; and this will be, no doubt, his most important service to science. A few butterflies and shells were the only other objects in Natural History that he brought.

After returning to England he had three months' leave of absence, and then joined a Brigade in the Isle of Wight, where he remained for some time. He married, August 2nd, 1866, Miss Way, eldest daughter of David Way, Esq., Afton, Isle of Wight. Mrs Tate was an excellent botanist, and assisted her husband in all his researches and wanderings after plants.

Dr. Tate's observational powers appear to have been kept in prompt exercise wherever he moved. In August, 1852, he discovered *Asplenium alternifolium* on Kyloe Crags, a novelty to that part of the district. It is recorded in the Club's "Proc.," Vol. iii., p. 102. He was also fond of angling, and it was while pursuing this recreation on the river Glen that, on the 24th May, 1866, he ascended Yeavinger Bell, and re-discovered *Pyrola secunda*, and also noticed *Cicuta virosa* in some of the ditches about Ewart. (Club's "Proceedings," v., p. 273). Mr. Baker, of Kew, in a letter says, he spent some months in the Isle of Wight, in 1867, and then enjoyed much of Dr. Tate's company, and that they had several excursions together. "He botanized a good deal in the Isle of Wight, but the ground had been too thoroughly searched for him to add much. The best find he and I made together was *Cineraria campestris*, of which there was an old record, but which Bromfield and More had never chanced to meet with. His Isle of Wight discoveries were communicated to Mr. A. G. More, and by him published in his Supplement to Bromfield's 'Flora Vectensis,' which came out in our 'Journal of Botany.'"

He was ordered to Gosport in 1868, and when acting professionally, caught a severe cold, which brought on a disease that quite invalidated him and rendered him unfit for duty. He was therefore put on permanent half-pay. From Gosport he returned to the Isle of Wight for a time. He then shifted to Torquay, where he remained for two years, but the climate proved unsuitable to him. He and his family removed to Fareham, in Hants, in 1872, where his health gradually declined. In 1873 he had an attack of

paralysis, from which he never recovered, and he died of apoplexy, 23rd September, 1874.

With much natural ability, and an acute and cultivated mind, Dr. Tate was capable not only of diffusing but also of augmenting science; but lacking robust health, although he kept up his studies to the close, he had not the physical energy requisite to complete his designs. For this reason his writings were not numerous. He was elected a member of the Berwickshire Naturalists' Club in 1852, and in 1857 wrote for the Proceedings a "Catalogue of Land and Fresh-water Mollusca found in the immediate neighbourhood of Alnwick," and in 1863 "Notes on the Botany of the Cheviots." He likewise contributed very minute and painstaking lists of the Plants and Mollusca of the vicinity of Alnwick to his father's elaborate History of their native place. In conjunction with J. G. Baker, Esq., F.L.S. (Assistant Curator of the Kew Herbarium), he wrote, in 1867, a "Flora of Northumberland and Durham" for the Tyneside Naturalists' Field Club,—a valuable work of reference to Border botanists. He was elected a Fellow of the Linnæan Society, June 17th, 1869, but contributed nothing to the Transactions or Journal of that learned body. When in the Isle of Wight he commenced a book which he proposed to call "A Handbook of British Medical Botany," and wrought at it for three winters till 1872, but health failing, he was obliged to relinquish it.

When at Torquay he formed a collection of the Mollusca of the neighbourhood, which is now placed in a cabinet in his house at Fareham. His valuable herbarium, to which he was constantly adding, contains about 1600 specimens of British plants. The collection and arrangement of it were the work and delight of a life-time.

Mrs Tate, two sons, and a daughter survive him.

Biographical Notice of A. Jerdon, Esq. By SIR WALTER,
ELLIOT, K.C.S.I., F.L.S.

LITTLE more than a year has elapsed since a memoir of the late Dr. T. C. Jerdon was read to the members of the Club, and now we are called upon to record the loss of his brother, —then in the full enjoyment of health, giving promise of enriching our “Proceedings” for many years with the results of his useful investigations, and of enlivening our meetings by his genial and welcome presence.

Archibald Jerdon, younger son of the late Archibald Jerdon, of Bonjedward, was born there on the 21st September, 1819. His mother, Elizabeth Sarah Milner, was the daughter of Mr. Milner, of Whitley, in the county of Durham, whose brother, Charles Milner, of Biddick Hall, for many years managed the extensive estates of the Lambton family, now Earls of Durham.

He was educated in Edinburgh, at the Academy, on leaving which he prosecuted his studies under a private tutor, at the same time attending classes at the College, in particular those of Natural and Physical Science.

The delicacy of his constitution in his earlier years was the cause of some difficulty in the choice of a profession. After hesitating between the career of a civil engineer and an Indian cadetship, he began to study agriculture under the Rev. James Traill, of Haddington, who rented the farm of Pappel-Westmains, in that neighbourhood. But shortly afterwards the state of his father's health obliged him to return to Bonjedward, where he took charge of the home farm. Meantime Mr. Jerdon had obtained the appointment of Collector of Inland Revenue and Distributor of Stamps for the county, on the death of Mr. Riddell, and an arrangement was made in 1841 by which he resigned these offices in favour of his son, who held them, together with that of Collector of County Rates, to which he was elected in 1868, during the rest of his life.

After the death of both his parents, about the end of 1842, the family estate was sold; and at Whitsunday, 1845, he took up his abode at Lintalee, near Jedburgh, whence he removed to Mossburnford, in 1848. There, in April, 1853, he married, and the following year changed his residence to Jedfoot. On leaving this house, which was required by the proprietor, in 1868, he resided for two

years at Melrose, previous to the purchase of the villa of Allerly, near Jedburgh, where, after a painful and lingering illness, borne with christian fortitude and resignation, he died, on the 28th January, 1874.

This simple record of an uneventful life would have called for little remark, especially in the case of one so modest and unpretending, but for his persistent and enthusiastic devotion to the study of Nature. From his earliest years he evinced a love of Natural History. His boyish tastes, encouraged by his father, were developed by the instructions of Professors Graham and Jameson ; and as soon as he left College he began to note the habits of birds and animals, and to make himself acquainted with the plants and flowers of his native glens. From 1843 to 1857, he used to communicate the results of these observations from time to time in the *Zoologist* ; and, in like manner, to the *Phytologist*, from 1847 till that serial ceased to appear in 1863.

In 1845, he joined the Club ; but having afterwards become disconnected with it, he was re-admitted in 1862, and in 1865 was chosen President for the ensuing year, attending the meetings at Eglington, Earlston, and Kelso, where he delivered his closing address on the 27th September, 1866.

The duties of his office necessarily kept him much at home, but he seldom failed to utilize his annual holiday in the cause of science. Some of the happiest occasions of his life were those devoted to botanical excursions with friends of congenial tastes. His health and strength improved as he grew older, and he became one of the most active and untiring explorers in these pedestrian excursions. I am indebted to one of his most frequent companions on these expeditions for the following graphic sketch :—"No one enjoyed a short holiday in search of plants more than he did ; whenever he could get away for a week from business, his wish was always to get among the hills and rocks where he could follow out his favorite study. One of his favourite places was Killin, as it suited well as a centre from which to ramble over the Braedalbane range. Ben Lawers, of course, having the name of being the richest and most productive mountain in Scotland, was often visited ; and I believe scarcely a nook or cranny there has escaped his keen eye. Craigchalliach was also a special favorite of his : and I shall never forget the delight of my friend on one occasion on discovering a moss (*Leskea rufes-*

cens) in fruit, near the original station discovered by Drs. Arnott and Greville ; which, however, since their day, had never been seen in fruit by any botanist in Britain. Clova was also a place he liked well, and I believe he has gathered all the rare plants found in that rich locality ; he was a capital mountaineer, and not even the steep sides of Glen Dole could prevent him from attaining his object. The Spittal of Glenshee was another place where I have had the pleasure of spending many happy days with him. It was a convenient station from which to visit Camlochan Glen, which was a great favorite, and also Glass Meal and Glen Callater on the Braemar side of the hill, all of which are well known to botanists as being rich in rarities. Tyndrum was also another good locality which he frequently visited ; and Inverarnan at the head of Loch Lomond, and at the foot of Ben Voirlich, was also a place which he delighted much in, and many mosses were discovered by him in that locality which had not been gathered elsewhere. The beautiful and picturesque Glen of the Trosachs, along with the heights of Ben Venue, had all been carefully examined by him. I think one of the last rambles we ever had together was to Teesdale. It had been his first visit there, and you may judge of his delight at seeing such a number of plants which were quite new to him, and which were unknown in Scotland. We saw there for the first time the lovely blue *Gentiana verna* and *Primula farinosa*, both growing in abundance. It was a sight never to be forgotten, and towards the end of his life he often recalled the pleasure that visit had given him, when looking at these plants, brought from thence, growing in his own garden at home. While thus delighting to visit localities at a distance, he had, however, not neglected to explore thoroughly all the hills and glens in his own neighbourhood. He had gone over the whole range of the Cheviots, and had also investigated all the smaller hills in the district. On the Dunion and on Ruberslaw he had discovered many good Fungi, as well as Mosses, some of them, I believe, new to Britain. I have known Archibald Jerdon for at least twenty years, and I may say that a pleasanter companion, a more upright and honorable man, or a kinder and truer-hearted friend I never knew."

He thus acquired a very competent knowledge of the Flora of the Borders, and even of many parts of Scotland

beyond them, which enabled him to enlarge the number of species already included in the local lists, and to add new habitats to those previously recorded, several of which are given on his authority in Duncan's "List of Indigenous Plants," appended to Jeffrey's History of Roxburghshire, Vol. iv.

Whilst residing at Mossburnford, he began to interest himself more particularly in Cryptogamic botany, and in March, 1857, he forwarded a short list of Fungi to the Phytologist, apologising for its imperfection, as he was "but a tyro in mycology," but at the same time commending the investigation of "these lower forms of the vegetable world to those who like himself may have pretty well worked out the Phænogamous flora of a district and are desirous of continuing their botanical researches."

The ardour with which he entered on this new field brought him into frequent communication with some of the most distinguished botanists of the day, by his intercourse with whom he was fortunate in adding several new species to science, some of which were named in honor of their discoverer*. For several years he kept up a continued correspondence with the Rev. M. J. Berkeley, beginning in July, 1850†. Most of the letters are too technical to quote, but a few extracts are added as specimens:—"Your *Sphæria* is the same with a species in my herbarium from Dr. Badham. It is unpublished, and as I have examined it in company with Mr. Currey, who is staying with me, we have named it *S. Jerdoni*, Berk. and Curr.‡ . . . *S. nigerrima* was first named *Dothidia Jerdoni*. It was published as *S. nigerrima* by Mr. Currey.§ (King's Cliff, Aug., 1859.)" Again, "Mr. Broome has been staying a few days with me, and amongst other things we have studied your two *Sphæria* with long *ostiola* on *Acer plantaoides* and *A. pseudo-platanus*. The first we have named *Sphæria stylophora*, B. and Br.; the second *S. blepharodes*, B. and Br. Both are quite new. (Kings Cliffe, Dec., 1860.)"

* e.g. *Lophiostoma (Sphæria) Jerdoni*, Berk. See Trans. Bot. Soc. Ed., ix., 331. [Cooke's Handbook, 2545.] *Agaricus (Stropharia) Jerdoni*, Berk. Ann. Nat. Hist., v., No. 913, t. xiv., 2. [Cooke's H. B., 393.]

† Upwards of 80 letters from Mr. Berkeley are found among his papers, most of them from King's Cliffe, but a few from Sibertoft.

‡ Now *Lophiostoma Jerdoni*, B. and Br., *vide supra*.*

§ Linn. Trans., xxii., 272. It now stands as *Sphæria nigerrima*, Blox. [Cooke's Handbook, 2612.]

At the conclusion of his Chapters on Fungi in the *Phytologist*, Mr. Jerdon strongly recommends the then new work on British Fungi of Mr. Berkeley, several of whose letters refer to the forthcoming publication. "The *Outlines of British Mycology*," he says, "will be out this week or next. It has twenty-three plates full of beautiful figures, characters of all the *Hymenocetes* and the larger fungi in their orders, and a list of 2380 British species. (Sept., 1860.)" "A few of Fitch's figures are defective, because done from specimens sent by post, but the greater part of them are, I think, admirable. Nothing was ever better done than the *Jew's ear Peziza*, the large *Polypori*, and several others I could point out. In some cases, as in *A. melleus*, the figures are defective, from being figures of individuals. But this was a necessary consequence of the mode in which the figures were prepared. The year 1859 was so poor in fungi that it was difficult to get species enough to figure, much less to make a selection of such as I could have wished. The book, however, is, I think, useful, and has been appreciated at its full value. It makes no pretensions beyond those of utility. (Oct., 1860.)"

Not the least interesting incidents in this correspondence are Mr. Berkeley's allusions to the heavy demands on his time when apologising for any delay in replying to a communication. In May, 1859, he writes, "I can reply to your letter only by neglecting other matters which are very pressing. I am so oppressed with urgent demands that I often wish I could make a bonfire of my whole collections and return once more to peace and quietude"; and then he proceeds to notice a number of specimens: "No. 1. On Raspberry, quite new; 2 and 3. *Sphæria*, about which I will consult Mr. Broome"; and in a P.S., "I enclose the true *Sphæria stercoraria* of Sowerby, a rare plant. At least I have found it but once before, and that fourteen years or more since." On another occasion he says, "I cannot undertake to name *Sphæria*, or, indeed, any fungi which require the microscope. If I did so to any extent, I should never have a moment to myself. I had formerly correspondents who sent seven letters a week, each containing half-a-dozen specimens, and sometimes up to thirty, never thinking of the expense of labour and postage to which it put me. This, at last, was so extremely oppressive that I was obliged to form a resolution never to attempt naming anything like

collections. *Hymenocetes* do not, in general, require the microscope, and there is no objection to give assistance in that order." When it is remembered that Mr. Berkeley was at the same time secretary to the Horticultural Society and also edited the Gardener's Chronicle, such statements speak volumes for the urbanity and kindness of the true man of science in lending aid to humbler students; but in connection with the subject of this memoir their value consists in showing the estimation in which Mr. Jerdon was held by so eminent a naturalist, as a fellow-labourer in the same field.

But Mr. Berkeley was not his only correspondent. Among his papers are many letters from the Rev. D. Bloxam, of Twycross; Mr. Frederick Currey, Blackheath; Dr. Edward Capron, of Shire; and a few from Messrs. Cooke and Worthington Smith.

He also paid considerable attention to Bryology, on which he corresponded with the late W. Wilson, of Paddington, near Warrington; and had made considerable progress in a list of mosses of the district, which he was preparing for the Club's Proceedings, his inability to complete which was a frequent subject of regret during his last illness. In one of his letters, Mr. Wilson begs him to send specimens of *Phascum recurvifolium*, *Hypnum heteropterum* and *flagellare*, and *Anacalypta Clarkeana* as a variety, and to give him examples from the habitat of *Buxbaumia aphylla**. He also imparts the following instructions for observing, which may be useful to some of our members:—"Mosses should always be dissected in water. If a peristome, let it be cut off transversely and the portion removed to another tablet of glass and placed in a single drop or so of clean water. Divide it into two portions lengthwise, and cover with a piece of glass; then view it under the microscope. If bubbles of air or spores are in the way, they must be removed and the object again covered with glass. For dissecting tools you need only have a pair of Glover's needles in light handles, properly tempered and sharpened. Much depends on the kind of microscope employed: a Hooker's microscope is the most convenient of any." Detailed instructions on the same subject likewise occur in letters from Mr. Mudd and the late Dr K. Greville.

Nor did he neglect the Lichen family of which he possessed

* See preceding Vol.

a goodly collection, of which he proposed to give an account on a future occasion.

His herbaria are extensive and well preserved and as he was no mean artist and had considerable facility in the use of his pencil, his botanical drawings, particularly of fungi, are of much value and might still be turned to good account.

He was at one time in correspondence with Mrs Charles Darwin and some others with the view of devising a more humane mode of destroying rabbits than by the ordinary way of trapping; but their benevolent intentions did not lead to any practical results.

From the above details it will be seen that the Club has lost in Mr. Jerdon one of its most useful and valuable members—one whose researches promised largely to extend our acquaintance with the productions of our Borderland, the great end and object of the Club. His hearty, genial presence will long be missed at our field gatherings, where his intelligent observations, and frank and kindly manner of communicating information made him always a welcome visitant.

The following list contains all that he has published, as far as could be ascertained:—

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- BATH. Proceedings of the Bath Natural History and Anti-
quarian Field Club, Vol. iii., No. i. 1874. 8vo. *The Club.*
- BELFAST. A Guide to Belfast and the adjacent Counties: by
Members of the Belfast Naturalists' Field Club. 1874. 12mo.
The Club.
- BOSTON, U.S.A. Proceedings of the Boston Natural History
Society, Vol. xv., Parts iii. and iv. 1872-3. 8vo. *The Society.*
- Ditto, Vol. xvi., Parts i. and ii. 1873-4. 8vo. *Ibid.*
- Memoirs of the Boston Society of Natural History,
Vol. ii., Part ii., No. iv. Note Additionelle au Memoire de M.
W. T. Brigham, intitulé "Volcanic Manifestations in New
England, 1638-1670": par M. Albert Lancaster. 1873. 4to.
Ibid.
- Ditto, Vol. ii., Part iii., No. i. Embryology of Tere-
bratula: by Edward S. Morse, Ph. D. 1874. 4to. *Ibid.*
- Ditto, Vol. ii., Part iii., No. ii. Birds of Western
and North-Western Africa: by George N. Lawrence. 1874.
4to. *Ibid.*

- CAMBRIDGE, MASS., U.S.A. Annual Report of the Trustees of the Museum of Comparative Zoology at Harvard College in Cambridge for 1872-3. Boston, 1873-4. 8vo. *The Museum.*
- EDINBURGH. Transactions of the Edinburgh Geological Society, Vol. ii., Part iii. 1874. 8vo. *The Society.*
- ESSEX, SALEM, MASS., U.S.A. Bulletin of the Essex Institute, Vol. v. 1873. Salem, 1874. 8vo. *The Institute.*
- GLASGOW. Proceedings of the Philosophical Society of Glasgow, 1873-4-5, Vol. ix., Nos. i. and ii. 1874-5. 8vo. *The Society.*
- Transactions of the Geological Society of Glasgow, Vol. iv., Part iii.; 1874. Vol. v., Part i.; 1875. 8vo. *The Society.*
- Transactions of the Glasgow Society of Field Naturalists, Part ii., Session 1873-4. 1874. 8vo. *The Society.*
- HAWICK. Transactions of the Hawick Archæological Society for 1873. 1874. 4to. *The Society.*
- LEEDS. Annual Reports of the Leeds Philosophical and Literary Society for 1872-3, and 1873-4. 8vo. *The Society.*
- LIVERPOOL. Proceedings of the Literary and Philosophical Society of Liverpool, No. xxviii. 1873-4. 8vo. *The Society.*
- LONDON. Proceedings of the Geological Association, Vol. iii., Nos. 5, 6, 7, 8; Vol. iv., No. 1. 1874-5. 8vo. *The Association.*
- Annual Report of ditto for 1874. 8vo. *The same.*
- MANCHESTER. Memoirs of the Literary and Philosophical Society of Manchester, Vol. iv., 3rd series. London, 1871. 8vo. *The Society.*
- Proceedings of the Literary and Philosophical Society of Manchester, Vol. viii., Sessions 1868-9. Manchester, 1869. 8vo. *Ibid.*
- Ditto, Vol. ix., Sessions 1869-70. 1870. 8vo. *Ibid.*
- Ditto, Vol. x., Sessions 1870-1. 1871. 8vo. *Ibid.*
- NEWCASTLE. Natural History Transactions of Northumberland and Durham, Vol. vi. 1874. 8vo. *From the Nat. Hist. Soc. of Northumberland and Durham.*
- OXFORD. List of Donations to the Bodleian Library. 1873-4. 8vo. *The Library.*
- PERTH. Eighth Annual Report of the Perthshire Society of Natural Science. 1875. 12mo. *The Society.*
- PLYMOUTH. Annual Report and Transactions of the Plymouth Institution and Devon and Cornwall Natural History Society, Vol. v., Part i., 1873-4. 1874. *The Institution.*
- WASHINGTON, U.S.A. Annual Report of the Board of Regents of the Smithsonian Institution, 1872. Washington, 1873. 8vo. *Smithsonian Institution.*
- Bulletin of the United States Geological and Geo-

graphical Survey of the Territories, No. i., 1874. 8vo.

Dr. F. V. Hayden of the U.S. Geological Survey.

———— Synopsis of the Flora of Colorado: by Thomas C. Porter and John M. Coulter. 1874. 8vo. *By the same.*

———— Monthly Reports of the Department of Agriculture for the year 1873. 8vo. *The U.S. Government.*

———— Report of the Commissioners of Agriculture for the year 1872. 1874. 8vo. *By the same.*

General Statement.

The INCOME and EXPENDITURE have been:—

	£	s.	d.
Balance in Treasurer's hands ...	43	9	8½
Arrears received	6	0	0
Entrance Fees	5	0	0
Subscriptions	50	12	0
	<hr/>		
	£105	1	8½

EXPENDITURE.

Printing.....	49	4	9
Expenses at Meetings	3	0	0
Postage and Carriage	12	1	1
Berwick Salmon Company for } 2 years.....	11	18	10
	<hr/>		
	76	4	8
Balance in hand.....	28	17	0½
	<hr/>		
	£105	1	8½

Places of Meeting for the Year 1875:—

Melrose	...	...	Wednesday, May 12.
Holy Island	...	...	June 23.
Dunbar	...	...	July 28.
Yetholm	...	...	Aug. 25.
Alnwick	...	...	Sept. 29.

MEMBERS ELECTED IN 1874.

ORDINARY MEMBERS,

Rev. Beverley S. Wilson, Duddo, Norham.
 Captain Charles Gandy, Barndale, Alnwick.
 Robert Gray, F.R.S.E., 13, Inverleith Row, Edinburgh.
 Robert F. Logan, Duddingston, and 4, Picardy Place, Edinburgh.
 Lieut. Col. William Crossman, Royal Engineers, Horse Guards, London.
 Captain F. M. Norman, R.N., 7, Shore Street, North Berwick.
 William Willoby, Berwick.
 Philip W. T. Warren, M.A., Royal Grammar School, Berwick.
 James Brown, Kelloe House, Edrom.
 James Hastie, Edrington, Berwick, and 305, High Street, Wapping, London, E.
 George Muirhead, Paxton House, Berwick.
 Thomas Henderson, Middlethird, Gordon, and St. John's College, Cambridge.
 J. B. Kerr, Commercial Bank, Kelso.
 Edward Liddell, Morris Hall, Norham.
 Rev. Archibald Bissett, Foulden, Berwick.
 William Elliot, Benrig, St. Boswell's.
 Samuel Grierson, M.D., District Asylum, Melrose.

Rain Fall at Glanton Pyke, Northumberland, in 1874.
 communicated by FREDK. J. W. COLLINGWOOD, Esq.; *and*
at Lilburn Tower, Northumberland: communicated by
 EDWARD J. COLLINGWOOD, Esq.

GLANTON PYKE.

		Inches.
January	-	2·20.
February	-	1·71'5.
March	-	1·84'5.
April	-	1·58'5.
May	-	1·28.
June	-	1·61'5.
July	-	2·14'5.
August	-	4·35.
September	-	2·66'5.
October	-	1·72'5.
November	-	2·68'5.
December	-	1·97'5.

Total - 25·78'5.

Rain Gauge—Diameter of Funnel, 8in.; Height of Top above Ground, 4 ft. 3½ in.; above Sea Level, 517 ft.

LILBURN TOWER.

		Inches.
January	-	1·335
February	-	1·503
March	-	1·842
April	-	0·886
May	-	2·090
June	-	0·910
July	-	1·998
August	-	3·163
September	-	1·250
October	-	1·799
November	-	4·018
December	-	3·437

Total - 24·231

Rain Gauge—Diameter of Funnel, 10in. square; Height of Top above Ground, 6ft.; above Sea Level, 300ft.

*Register of Rain Fall in 1874, kept at Springwood Park,
Kelso, Roxburghshire. By GEORGE WEMYSS.*

DATE.	JAN.	FEB.	MAR.	APR.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
1	0.30			0.17	0.02	0.21	0.17	0.46			0.20	0.16
2		0.24		0.48				0.06	0.05	0.04	0.26	
3	0.02			0.16	0.08		0.02		0.32		0.02	
4					0.10			0.07	0.07		0.02	
5			0.12	0.12	0.05					0.06	0.48	0.24
6					0.05			0.04	0.16	0.60		
7		0.02		0.07	0.22			0.16				
8	0.01			0.02	0.06			0.20		0.02		0.74
9						0.02		0.33	0.25	0.11		
10			0.08	0.08	0.14			0.17	0.10	0.10		0.02
11					0.04			0.20	0.05	0.07		0.40
12	0.06			0.28	0.02		0.18	0.34	0.10	0.20	0.01	0.20
13	0.10	0.04	0.09					0.01	0.02			0.28
14		0.11		0.03	0.26		0.63	1.02			0.08	0.02
15		0.31	0.10					0.04		0.02		0.10
16	0.11	0.01	0.01					0.08	0.02	0.03	0.02	0.10
17	0.10										0.15	
18	0.21		0.03	0.02				0.11	0.02	0.31	0.36	
19	0.15		0.12			0.02			0.01	0.04	0.02	
20			0.04				0.19			0.18	0.01	
21		0.20				0.08		0.18	0.08			0.10
22		0.03			0.07	0.10	0.83		0.50			
23					0.31	0.07						
24					0.28		0.12			0.10	0.06	
25		0.04				1.01	0.09				0.45	
26		0.77				0.08	0.07		0.03	0.60		
27		0.03					0.02					
28			0.11				0.40	0.72		0.28	0.32	
29			0.05		0.21	0.02	0.36	0.10	0.14	0.04	1.45	
30						0.17		0.10	0.29		0.38	0.60
31			0.15					0.71				
	1.06	1.80	0.90	1.43	1.91	1.78	3.08	5.10	2.21	2.80	4.29	2.96

Latitude, $55^{\circ} 36' 2''$; Longitude, $6^{\circ} 48''$. Time of Observation, 9 a.m.
Height of Receiver of Rain Gauge above Ground, 1 foot; above Sea Level, 130 feet.

PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB.

*Address delivered to the Berwickshire Naturalists' Club, at
Alnwick, September, 29th, 1875. By the Rev. JOHN
F. BIGGE, M.A., Stamfordham, President.*

GENTLEMEN,

BEFORE resigning my office, as your President, and giving a detailed account of the different meetings held by the Club this year, I must express to you my grateful thanks for having placed me in this honourable position, which was most unexpected on my part; and I also thank you for your kindness and hospitality shown to me during my year of office. I much regret that I was unable to attend the annual meeting last year at Kelso, and the first meeting this year, being at the time at Hastings; but thanks to our excellent and most painstaking secretaries, I am able to give an account of those days' proceedings from their copious notes. Without further preface I shall take up the proceedings of the Club.

On Thursday, 25th September, 1874, the final meeting of the Club for the season was held at Kelso, when there was a large attendance of members. By the kind invitation of

Sir George H. S. Douglas, Bart., M.P., the members of the Club had breakfast at Springwood Park. Among those present were Dr. Robson Scott, President; Mr. James Hardy, Secretary; Mr. R. Middlemas, Treasurer of the Club; Sir George Douglas, Professor Balfour, Messrs. J. H. Scott Douglas, D. Milne Home, Captain Milne Home, M.P., Sheriff Russell, John B. Boyd, James Johnston, Chief Magistrate of Kelso; Rev. Messrs. Stobbs, Lamb, Macalister, Paul, Graham, McKerron; Dr. Turnbull, W. Stevenson, Dr. Dewar, W. Elliot, Charles Anderson, Colonel Briggs, Dr. Paxton, John Clay, M. H. Dand, G. S. Douglas, J. S. Dudgeon, James Bowhill; Revs. P. G. McDouall, W. Darnell, A. Jones, S. A. Fyler, E. Rutter, E. A. Wilkinson; Messrs. James Wood, James Tait, Ralph Forster; Rev. D. Yair, Major Paton, Dr. Brown; Messrs. A. Brotherston, T. Friar, E. Friar, T. Henderson.

The members were kindly shown all the objects of interest inside the house, and after breakfast walked about the grounds and gardens. Before leaving the house the President moved a vote of thanks to Sir George Douglas for having so kindly entertained the members of the Club, which was seconded by Mr. Milne Home, and heartily agreed to.

The members then set out for the day's excursion, under the guidance of Sir G. Douglas. They crossed the Teviot to the ruins of Roxburgh Castle, thence went over by the Trow Craggs, and thence down by the gardens and grounds of Floors to Kelso, where some time was spent in examining the Museum. At four o'clock the members assembled to dinner in the Queen's Head Hotel, where some additional members were present, including Messrs. John Ord, W. B. Boyd, Thomas Allan, Rev. Adam Davidson. After dinner, an able retiring address was read by the President, who concluded by nominating as his successor the Rev. J. F. Bigge, Vicar of Stamfordham.

A motion to change the day of meeting, of which notice

had been given by Sir Walter Elliot, was moved by Sheriff Russell, and seconded by Mr. Milne Home. The Rev. W. Darnell moved that the meetings be held, as at present, on Thursdays. 15 voted for the motion, and 9 for the amendment.

Professor Balfour made some statements on the botanical part of the day's excursion.

Mr. Milne Home drew attention to the three natural terraces which are distinctly visible in the vicinity of Floors Castle. He did not think that these could have been formed by the river. He had there seen masses of sand and gravel 100 feet high, and these indicated that great changes had taken place, and that the lake or river had remained at the same level for a long time, and then that there had been sudden falls. What had occasioned those falls? This might be made a subject of enquiry by the members of the Club. He also suggested that the family of Maxwell, who had formerly their head-quarters in this district, might also form the subject of a paper. The places of meeting appointed for next year were Melrose in May, Holy Island in June, Dunbar in July, Yetholm in August, and Alnwick in September.

Mr. George Muirhead, Paxton; Dr. Samuel Grieron, Melrose; Mr. Edward Liddell, Morris Hall; Rev. A. Bisset, Foulden; and Mr. W. B. Elliot, of Benrig, were proposed as members.

The first meeting of the year 1875 was held at Melrose, on Wednesday, the 12th of May. Present:—The Secretaries, Dr. Francis Douglas and Mr. Hardy; Sir Walter Elliot; Messrs. D. Milne Home, A. Curle, J. H. Borthwick, C. W. Peach, B. N. Peach, E. Selby, C. M. Wilson, James Wood, J. B. Kerr, A. Brotherston, John Freer, Sholto Douglas, J. Thomson, F. Walker, J. Scott Dudgeon; Drs. C. Stuart, Dewar, Grierson; Lieut.-Col. The Master of Sinclair, Capt. Macpherson; Revs. Farquharson, Wilson, Graham, Stobbs, M'Douall, Green, Davidson, M'Kerron, Paul.

After breakfast, were exhibited specimens of *Symphytum tuberosum*, *Salix purpurea*, and *S. Helix*, which were found near the Chain Bridge. Rev. Mr. Farquharson showed specimens of *Hieracium collinum*, a plant lately discovered near Selkirk. *Draba muralis* is found plentifully in the nurseries south of the railway. The members set out on their rambles under the able guidance of Mr. Peach, of the Ordnance Geological Survey, and Dr. Dewar. After a short visit to the quarry to the south of the railway, skirting the foot of the Eildon Hills, they entered the grounds of Chiefswood, formerly the residence of J. G. Lockhart, the son-in-law of Sir W. Scott, but now in the occupancy of Mr. Francis Kerr, son of Lord Henry Kerr. Here *Symphytum tuberosum* was found in abundance. Thence the party went to Huntly-burn House, formerly the residence of Professor Adam Ferguson, and on to Cauldshiels Loch, where *Ribes alpinum* and *Doronicum plantagineum* were seen growing (both introduced).

In the Rymer's Glen was noticed *Cornus sanguineus* (planted),—several ferns; and *Sticta herbacea* was found growing on a fallen tree, and *Isoethecium alopecurum* was in fine fruit on the rocks beside a small cascade. The Wood Wren (*Sylvia sylvicola*) was heard. Mr. Peach pointed out the geological peculiarities of the district, and how the dikes of porphyry crossed the Silurian rocks. There were a few examples of fossiliferous black shale, or slate containing graptolites. The next place visited was an ancient camp on the hill to the south of Cauldshiels Loch. On the shores and in the deep water of the lake *Littorella lacustris* grew; and three species of *Potamogeton* were driven ashore by the waves raised by a brisk gale, viz., *Potamogeton heterophyllus*; *P. crispus*, var. *serratus*; and a species like *P. praelongus*, but without fruit or flowers, *Lathyrus tenuifolius* grew in an adjoining wood, and very dwarf specimens of *Salix nigricans* in a boggy spot at the northern end of the lake. The galls of *Cynips lignicola*

were collected from some scrubby oaks. They have only been observed in this neighbourhood within the last five years. In the pond at Abbot's Moss, the yellow water-lily, which had been introduced there by Sir Walter Scott, was blossoming freely; and *Salix nigricans* was again detected.

Here the party divided, one section going to Abbotsford, another returning direct to Melrose, and a third down the bank of the Tweed, where specimens of *Valerianella olitoria*, *Hieracium boreale*, *Polygonum Bistorta*, *Stellaria nemorum*, &c., were gathered. The Club dined at the King's Arms Hotel, at four o'clock, about thirty in number. The following were proposed as members:—Major J. H. Ferguson Home, of Bassendean; Captain A. Forbes, R.N., of Berwick; Messrs. A. H. Gregson, of Lowlynn, M. G. Crossman, of Berwick, and John Freer, of Melrose.

The following papers were read:—(1.) Notice of the Life of the Rev. Abraham Robertson, D.D., Savilian Professor of Geometry and Astronomy at Oxford, and a native of Dunse. (2.) Notice of James Richardson Logan, descended from the Logans of Fishwick, who distinguished himself by his researches in Natural History and Philology in the Straits Settlements, and conducted a literary and scientific Journal printed at Singapore, in 12 vols., entitled, "Journal of the Indian Archipelago." This notice consisted of a letter from the Rev. Andrew Cunningham, of Eccles, with remarks by Sir Walter Elliot. (3.) Notice of a Red Deer's Antler found near Allanton, by Mr. John Ferguson. Sir Walter Elliot mentioned that the remains of the Red Deer had been found near Linton and Hassendean, both in Roxburghshire, and suggested that these and similar remains should be lithographed in the Club's Transactions. (4.) Notice of Three-bearded Rockling, *Motella tricirrata*, found off the coast near Redheugh, by Mr. Hardy. It is the first recorded specimen taken on the Berwickshire coast. (5.) Notice of the Distinguished Ecclesiastics and others entombed in Melrose Abbey, by Mr. James Hardy. (6.) Notices on

Monstrosities of Dandelions, by Mr. C. W. Peach, who exhibited a collection of the dried flowers on account of their peculiarities—many of them having two and even three flowers on the stalk, and others a flower and leaf on the flower-stalk. Some drawings, by Mr. R. F. Logan, of Edinburgh, of interesting antiquarian objects from the neighbourhood of Coldingham were shown. Mr. Wood, of Galashiels, exhibited the following objects:—A large glass-bead, of a pale yellow colour tinged with red, discovered by Mr. Robert Renton, March 16, 1875, under a stone about two tons in weight, in a field on Fairnalee, six yards from the Catrail; a small ornamented bronze Celt, found on the farm of Kittyfield, in the parish of Melrose; porphyritic bullet found in Melrose Churchyard, alleged to be a cannon ball shot at the Abbey by Oliver Cromwell's troops from the Gattonside Hill, but probably of greater antiquity, and of local manufacture; many Fairy stones from the Elwand or Alwent rivulet; one of the first sacramental tokens of Melrose Church after the Reformation. Rev. P. G. M'Douall showed a curious bronze key, of medium size, with the figure of an open cross on the handle, found on the Kilham Hills. Mr. Borthwick produced a polished porphyritic stone from the Eildons, showing what is called "slickenside," caused by two sides of a fault rubbing the one against the other during upheaval or subsidence. At the request of Mr. Milne Home, Mr. Peach gave his ideas about the formation of the immense deposit of gravel in the Melrose Valley, which he attributed to the river action during very long ages before the rock at Leader Bridge was cut to its present depth.

An ancient river margin, high above the level of the Tweed's flow now, runs along the valley, and reaches the upper course of the river.

Mr. Peach showed the map at present being constructed for the Government Geological Survey. He also exhibited and explained some beautifully drawn sections of the local rocks, which showed plainly that the porphyry had disrupted

Silurian and the old red sandstone; and that in the Eildons especially the porphyry overflows the red sandstone, which abuts against it, but is at present concealed by the porphyry debris.

Several members, after the meeting broke up, visited the Abbey. On the walls of the cloisters a sea-plant, the common scurvy-grass (*Cochlearia officinalis*), was growing plentifully. This may be accounted for by its being one of the plants cultivated by the monks. On the coping of a wall to the south of the Abbey, *Poa compressa* was observed.

The second meeting of the year was held at Holy Island, on Wednesday, 23rd of June, 1875. There was a large muster of members of the Club. Upwards of 65 were present, including—The Rev. J. F. Bigge, of Stamfordham, President; Dr. F. Douglas and Mr. Hardy, Secretaries; Mr. Crossman; Drs. Richardson, R. N., C. Douglas, Stuart, Brown, and Hughes; Revs. Evans, Lamb, Thomson, Fyler, Green, M'Douall, Graham, M'Kerron, Tulloch, Meggison, Paul, Johnstone, Jones, Rutter, Henderson, Edmunds, Parr; Messrs. Boyd, Turnbull, Boyd, Rea, C. Watson, Clay, Smith, Dickson, Allan, Currie, Bolam, Brunton, Heatley, Dunlop, Turnbull, Arkle, Doughty, Major Paton, R. Paton, Captain Carr-Ellison and son, Storer, Wilson, D. Watson, Nicholson, Captain Gandy, E. Bigge, Hastie, Muirhead, Kerr, Captain Forbes, R. N., Smith (Inspector of Works at Holy Island), A. Gregson, Bertram, Linton, A. Evans, &c.

After assembling at the commodious reading-room recently erected by Mr. Crossman, who is a native of the Island, the company proceeded to view the Priory. This was commenced to be built by Bishop Carileph, of Durham, in 1093, or '4, and was completed by his successor, Bishop Flambard. In 1363 it was new roofed; in 1821 the ruins were cleared; but it is needless for me to describe it, as it was done so ably in a paper by Dr. Clarke, of Berwick, in 1836.*

* Between the 2nd and 3rd pillar on the north aisle exists an ancient well (which I have not seen mentioned in any account of the ruin). It was levelled up in the year 1827, and 16 feet of rubbish was put into it. About forty years ago, a carved stone was let into one of the walls, which previously had been tossing about, representing an animal with a large tail.

A visit was then paid to the Parish Church. For details of the architecture and history of this Church, and the Priory, I must refer you to the "Churches of Lindisfarne," published in 1870, by Mr. F. R. Wilson.

Passing towards the Castle, an uncommon grass, *Glyceria procumbens*, was found in great abundance, and *Trifolium scabrum* was found growing on the basalt. *Cynoglossum officinale* is very plentiful, and henbane (*Hyoscyamus niger*) was observed in a few places; also viper's bugloss and poppies; and *Samolus valerandi*, in marshy ground near the northern end. *Statice limonium* grows plentifully on St. Cuthbert's Island. One of the most interesting plants on the Island is the Oyster-plant, (*Mertensia maritima*). A few of the party, after examining the lake, were conducted to it by my intelligent friend, Mr. John Anderson, the school-master at the Island, and a native of Stamfordham. The plant was in full blossom. Very few birds were observed:—Black-headed Tern, Ring Dotterel, Wheat Ear, Coot, and White-throat; and a good many of St. Cuthbert's Ducks were seen out at sea. I am informed by Mr. Anderson that during a residence of one and a half years, he has never seen a Missel Thrush, a Yellow Hammer, any Tit-mice, or a single Chaffinch on the Island. He also informed me that the Brent Goose had not been so plentiful for twenty years as last year, the market price of which was 1s. 6d. A flock of 18 wild Swans was seen off the Island last winter. The general opinion is that the wild fowl are far fewer in number than formerly. Seals are not near as numerous as formerly; they have been destroyed. At the extreme western point of the Island is the "Bloody Pool," thus called from the slaughter of seals. Sometimes to the north of the Island there are some very large seals seen—the fishermen estimate the largest to be about 80 stones; they are spotted.

This year there were three pheasants' nests in the Island. A few hares have been killed last winter, one of which weighed $11\frac{1}{4}$ lbs., and another 11 lbs.

Dog fish a few years ago were very abundant, and are now comparatively rare.

Sixteen boats, which belong to the Island, are engaged in herring fishing ; a few years ago thirty-six were engaged in the trade ; only two of the sixteen are decked, and this is the first year in which decked boats have been employed. Very few trees grow on the Island, of Elder, Plane, Willow, and Thorn. A few have been planted on the south side of the Lough, but trees cannot struggle against the fierce winds. Herrings are cured on the Island, but not smoked. About thirty or forty men are employed in working and burning the lime ; and five vessels are engaged in this trade between the Island and Dundee—taking lime to Dundee, and bringing back coal.

Coal has been worked on the Island, but not for a number of years. The water is good, and obtained from two springs. There exists a third, but it is below high water mark. Excellent water may be found by sinking three or four fathoms. On the Island there is neither doctor, tailor, shoemaker, nor blacksmith, nor even a draper's shop, where you could buy a yard of calico. The word Pig is considered extremely unlucky. When a fish called the Sea Sow or Sea Swine is hooked (when children are fishing for sport), they at once cut the line and let her go. During the spring of 1875, a temperance lecture was given. During the lecture, the lecturer mentioned, that in some place a boy had a rabbit and gave the proceeds to help the cause ; one girl had a "temperance goose." At last he came to a "temperance pig." At the word, each eye sought his neighbours ; from complete silence there was a general shuffle, &c. Of course the lecturer was ignorant of what he had done, but it told not a little against the attention which followed. The baiting of the lines is generally left to the women and girls. A lad and one of these girls having quarrelled, she being busy at the time baiting the line, he to aggravate her, purposely said—"Phemie Fender's gan to kill

her pigs the morn." This was sufficient; Phemie ran into the house, and a row was the result. The superstition was that the line the girl was baiting would not catch a fish after the word "pigs" had been used. The fishermen in fine weather place their crab creels in shallow water near the rocks, but in stormy weather they are sunk as deep as 16 fathoms; and from this depth they are often moved from their places and cast ashore—proving that the surface action produced by a storm does act to a considerable depth beneath the surface. Before I conclude these notes about the Island, I must not omit to describe a very strange way in which rabbits are sometimes made to bolt from their holes, and this mode is also used in the Channel Islands. A good strong large dog-crab is selected, and a piece of tallow candle, about an inch long or less, is stuck on to the back of the crab. A suitable rabbit-hole is selected, the candle is lighted, and the crab sent on his travels down the hole with his light. The rabbits are said to bolt out into the net, as if a ferret had been sent in.

Soon after two o'clock the members left the Island for Cheswick House, where they were most sumptuously and hospitably entertained at dinner by Mr. Crossman. Between fifty and sixty dined. Dr. F. Douglas brought from Lurgie Loch specimens of *Carex filiformis*, and a *Myriophyllum* of an undetermined species, both found by Mr. Brotherston, of Kelso. The following were proposed as new members:—Mr. David Watson, Hawick; Mr. Adam Robertson, Alnwick; Mr. James Allan, Ava Lodge, Berwick; Mr. Charles Erskine, of Shielfield, Melrose; Mr. Arthur H. Evans, Scremerston. The day was very fine.

The third meeting of the Club for the season was held at East Linton, on Wednesday, July 28th, Dunbar being too full to afford accommodation. The day was perfect. There were present—Rev. J. F. Bigge, President; Mr. James Hardy, Secretary; Sir Walter Elliot, Dr. Robson Scott; Messrs. J. B. Boyd, W. Stevenson; Dr. R. Hood; Captain

Forbes ; Revs. P. M'Kerron, J. Hunter, D. Paul, W. Stobbs, A. I. Ritchie, F. A. Wilkinson ; Messrs. John Bertram, J. Hunter, C. Duncombe Shaftoe, A. Brotherston, W. Shaw, J. Smail, J. Wood, D. Croal.

After breakfast, the members of the Club walked to Prestonkirk. A part of the Tower is said to be Saxon, but, (except the chancel windows, of Early English, the interior of which is now used as a burial place,) of nearly every part of the building it may be said, in the language of an inscription over the chancel: "Antiqua—nunc renovata." On the northern wall of the Tower are the remains of a mutilated figure of St. Baldred, which was broken by a mason during the rebuilding of the Church. This was one of the three churches of that famous East Lothian saint. On some of the tombstones, as on several of those in Roxburghshire Churchyards of the 18th Century, the trade of the deceased is indicated by symbols cut upon the stone, *e.g.*, a pick and wheel for a miller, a set of scales for a grocer, and such like. The Rev. A. I. Ritchie, minister of the parish of Whitekirk, read a short and very interesting paper on the Church. Pellitory of the Wall grows on the churchyard wall. Yellow Toadflax, Tansy, Common Mallow, and the Bitter-sweet (*Solanum*) grow plentifully on the side of the road which leads to Tynninghame. Passing through the village and the lodge, an avenue of beech leads to the Park. Many fine timber trees grow here. The far-famed holly hedges are showing symptoms of decay. The Club walked through the gardens, which are well sheltered. There was a plant about a yard high growing near the south-east door into the garden. I asked the gardener, but he did not know what it was. Having one myself, I was anxious to get the name. Subsequently I wrote to Professor Balfour, who kindly gave me the name, which is *Phytolacca decandra* (Virginian Poke). It was originally imported from North America, and is used in cases of typhoid fever. The Club next proceeded to the

remains of the Old Parish Church, and a beautiful specimen of the pointed or Norman architecture it is. If this were the Parish Church, the parish must have been a very small one, for the nave is only 18 feet, and the chancel 9 feet long. The zigzag ornament runs round the arches. The western capitals are ornamented with scales. This ruin stands in the Park on the south side of the house, but is completely hidden by trees and brushwood. In a niche on the south side of the nave is a recumbent female figure with a dog at her feet. There are two coats of arms at the point of the arch above the niche. One of these—a fesse twisted—appears to belong to the family of Carmichael; the other, with four mullets, two of them combined (a sculptor's blunder?) is doubtful; there is also a third shield, plain. The old churchyard lay around, and, as appears from an extract from the Parish Register, several of those blown up with the Castle of Dunglas, in the reign of Charles I., were buried here, including the second Earl of Haddington. The late Earl of Haddington was buried within the Chapel.

In an aviary—a buzzard, a raven, a carrion-crow, and a long-eared owl live together. The gamekeeper had also a fine collection of young gold pheasants. The house is a good example of the baronial Scottish mansion. The house has been renewed on the outside, the interior being old; it is built of red sandstone, from a quarry at Broomhouse on the estate. A collection of birds in the house contains that rare bird, the Great White Heron, and a Honey Buzzard, both shot here. A Golden Eagle has also been shot here. Many interesting shrubs and trees were seen—an *Arbutus*, 24 feet high; *Garrya elliptica*, a bush 35 feet in circumference; five plants of *Yucca gloriosa* were in full blow. A Silver Fir was seen in Binning Wood, 108 feet high and 15 feet in circumference, and some very fine Scotch firs. A very broad and long avenue leads to the seaside, which is protected by acres of the Sea Buckthorn, which grows most luxuriantly. It is very strange what fine specimens of

trees are found here, and growing so very near the rough blasts from the German Ocean.

At Whitberry Point, a geological party, headed by Mr. Stevenson, were shown the outburst of trap rock through sandstone, which has caused an alteration in its structure. Another party went along the links towards Ravensheugh. Great quantities of caterpillars of the Cinnabar Moth (*Callimorpha Jacobæa*) were here feeding on the ragwort. The sea-view was very beautiful and extensive, with the Bass to the north—the Towers of Tantallon Castle—North Berwick Law—the ridge above Whitekirk—the Garleton Hills and the Lammermoors, which terminated in the Downhill of Spot, the bay being bounded on that side by Dunbar point occupied by the town.

Mr. Hardy there read a very interesting account of the first Battle of Dunbar, between the English and Scots, in the time of Edward I., 28th April, 1296.

The course now led up the Binning wood. This wood was first enclosed and planted in 1707, by Thomas, sixth Earl of Haddington, to whom there is an obelisk erected in the woods, which he may be said to have created. The Club were extremely obliged to the Earl of Haddington, who kindly allowed its members to wander through his grounds and woods, which contributed greatly to the pleasure and amusement of the day. They then came to the North Berwick road, and thence returned to dinner, where we mustered about twenty. The following gentlemen were proposed as members:—Mr. John Bertram, Howpark, Grant's House; Mr. John Hood, Townhead, Cockburnspath; Rev. Joseph Hunter, Cockburnspath; Mr. John Johnson, Tweedbank, Kelso; Rev. A. I. Ritchie, Whitekirk; Rev. John Methven Robertson, Stow. A paper by Dr. John Stuart, Secretary to the Scottish Society of Antiquaries, was read, entitled "The Early Ecclesiastical History of Dunbar." In a note Dr. Stuart mentioned that members might aid in indicating "Patron Saints," if there were any such in their

individual localities; this being sometimes of service in following out the obscure intimations of early history or legend. Mr. Hardy exhibited a number of Flint and Stone Implements, recently discovered, principally from the Parish of Cockburnspath. Mr. Johnson, of Ramrig, sent a curious stone hammer, supposed to have been used in the manufacture of flints. Mr. Brotherston handed in a list of plants, which on the previous day he had gathered along the coast, near the mouth of the Tyne.

Sir Walter Elliot was appointed to represent the Club at the Bristol meeting of the British Association. Thus ended a delightful day, being the first meeting ever held in that locality.

The following are the plants picked up by Mr. Brotherston on this occasion:—

SOLANUM DULCAMARA. Plentiful in many places.

SILENE PUBERULA. Common.

VERONICA ANAGALLIS. In plenty near Ravensheugh.

CYNOGLOSSUM OFFICINALE. Ravensheugh and other parts of the coast.

VALERIANA SAMBUCIFOLIA. Ibid.

GERANIUM SANGUINEUM. Abundant and fine.

HIERACIUM VULGATUM. On Ravensheugh.

LISTERA OVATA. Ibid.

HIPPOPHAE RHAMNOIDES. Plentiful on the sand-hills.

SENECIO VISCOSA.

HYOSCYAMUS NIGER.

SCIRPUS MARITIMUS, *GLYCERIA MARITIMA*, *GLAUX MARITIMA*, *SCHÖBERIA MARITIMA*, *CAREX DISTANS*, *C. VULPINA*, *ATRIPLEX BABBINGTONI*, *A. LITTORALIS*, *A. ARENARIA*? (south side), *SALICORNIA HERBACEA*, *JUNCUS GERARDI*, *TRIGLOCHIN MARITIMUM*, *SPERGULARIA MARGINATA*, *ZOSTERA MARINA*. In the salt marshes of the Tyne.

ANTENNARIA GALLICA. Both sides of the Tyne.

—— *MARITIMA*. Intermixed on the south side.

ELYMUS ARENARIUS. Mouth of the first burn, south from the Tyne.

GERANIUM PUSILLUM. Roadside near Dunbar.

SILENE MARITIMA and *FESTUCA GLAUCA*. Dunbar Castle.

MIMULUS LUTEUS. Burn near Broxmouth.

SISYMBRIUM SOPHIA. Roadside near Broxmouth.

LINARIA MINOR.

To these may be added—*Viola hirta*, *Arabis thaliana*. *Erythræa centaureum*, and *Gentiana campestris*, more or less plentiful on the sand-hills; *Mentha arvensis*, in the pastures; *Reseda lutea* and the common Reed by ditch sides, the latter representing the former marshy state of the ground; *Rubus cæsius*, sides of public road near Belton-ford; *Symphytum officinale*, near a ditch not far from that place.

The fourth meeting of the Club was held at Yetholm, on Wednesday, August 25th, 1875. This was a very wet, stormy morning from 7 till 9, when it cleared up, and became a beautiful day. The members breakfasted at the Plough Inn. Present—The Rev. J. F. Bigge, President; Dr. F. Douglas, Secretary; Dr. C. Douglas, Dr. C. Stuart, Professor Balfour; Messrs. John Sadler, W. B. Boyd, J. B. Boyd, John Turnbull; Sheriff Russell, Dr. Robson Scott; Revs. A. Davidson, P. G. M'Douall, J. S. Green, J. E. Elliot, Rev. Dr. Leishman; Messrs. F. W. Collingwood, J. Robson Scott, W. Stevenson, T. Henderson, A. Brotherston, J. Clay, C. B. P. Bosanquet, E. Friar, D. Watson, E. Douglas Simpson; Captain Forbes, R.N.; Mr. James Leishman. The Rev. A. Davidson exhibited specimens of the *Psamma baltica*, and Mr. Brotherston a specimen of the Dodder (*Cuscuta Europea*), which he had found growing among tares at Blakelaw Edge. The whole party started for Tod-crag, where greenstone porphyry is found with a vein of sulphate of barytes. In the pool at the foot of the crags the following plants were found:—*Sium inundatum*, *Myriophyllum alterniflorum*, *Ranunculus floribundus*. On the crag several of the Hieraciums were found—*H. pallidum*, *cæsius*, and one which much resembled *boreale*. I was very sorry to learn that on this crag no less than three badgers had been killed within the last few years. It is a great pity that this now rare animal should be thus recklessly destroyed; sometimes for the sake of putting a badly stuffed specimen in a glass-case, and sometimes for the sake of some game. Any country gentleman who possesses such a rarity should, in my opinion, treat it with the greatest

care and kindness, and let his gamekeeper give it a plentiful supply of rabbits. The party here divided. A small portion, under the able guidance of the Rev. A. Davidson, went to examine several ancient British camps on the farms of Yetholm Mains in Scotland, and Elsdonburn in Northumberland. For the following description I am indebted to the able pen of the Rev. A. Davidson:—"There is one camp on the top of each of the two hills on the ground of Yetholm Mains, called The Burnt Hamiltons, or Burnt Humbildons. These, as time pressed, were passed without ascending the hills; but the entrance and zigzag approach up the steep southern face could be distinctly seen. On a high level ridge to the south of the western hill, and close to it, several stone circles and circular hollows were seen, denoting, as the party thought, the ordinary dwellings of the ancient inhabitants in time of peace. On the east of this ridge, a deep ravine runs N.N.E., and as it falls into Halterburn, closely skirts the eastern side of the hill. Along the side of this ravine, next the old village site, there is traceable for four or five hundred yards a deep ditch, the earth from which is thrown up close to the edge of the ravine. By this means the left bank is much heightened, and a very strong protection given to the village on the east. The trench stops at the point where it touches the eastern base of the hill, and from its strength and direction the ancient dwellers had evidently to fear enemies coming upon them from the east.

"About two short miles more brought the party to the large and interesting Camp of Elsdonburn, the best defined of any in the district. It is nearly circular, and it occupies a projecting point of a spur running eastward from the hill called Coutsnouth. Its strength and importance are shown by three very strong concentric circles of which it is formed. The inside area is about $1\frac{3}{4}$ acres, studded with the circular foundations of ancient dwellings. The three ramparts seem to have been of equal strength, and a peculiar feature in

their construction is, that their outward faces have all been of rough stones. The formidable nature of the work may be imagined from three concentric circles about 15 feet apart, each with a face of stone about 5 or 6 feet perpendicular. The entrance is from the north-west, from ground somewhat lower than the site of the fort. The dangers to be met by this place were from the east, as both ditch and dyke seem stronger in that direction. But as it now stands, there is proof it must have been a formidable barrier to any foe in old British times."

The main body proceeded to Yetholm Loch. Mr. Oliver, of Lochside, came and invited the Club to come to luncheon; only a few fell victims to his kind hospitality. Round the margin of the Loch were gathered—*Cicuta virosa*, *Scutellaria galericulata*, *Lycopus Europeus*, a white variety of *Bartsia Odontites*, *Scirpus lacustris*, *Campanula rapunculoides*, and growing in the water, *Littorella lacustris*, *Zannichellia palustris*, the Yellow Water Lily, (*Nuphar lutea*); washed to the shore were *Callitriche autumnalis*, *Potamogeton pectinatus*, *P. pusillus*. At the west end of the Loch, the following plants were found, *Ranunculus lingua*, *Veronica scutellata*, *Typha lalifolia*, (Great Reed Mace), *Lythrum salicaria*; a few Mosses were found, including *Mnium Cinclidioides*, and *Climacium dendroides*, (with fruit rising). Primside Bog was next reached, and a rare treat for the Botanists was found; *Vaccinium oxycoccus*, *Habenaria bifolia*, *Carex filiformis*, and *C. limosa*, *Festuca canina*, and several *Sphagnums* fruiting very freely. The Sundew, *Drosera rotundifolia*, and Butterwort, *Pinguicula vulgaris*, were also found. In the walk down Bowmont were found, *Teesdalia nudicaulis*, *Trifolium arvense*, *Vicia sativa* var., *Bobartii*, *Veronica anagallis*, *Ænanthe crocata*, *Ranunculus tricophyllus*, *Dianthus deltoides*, *Antirrhinum vulgare*, &c. During the day's walk the following willows were gathered, *Salix pentandra*, *Russelliana*, *triandra*, *Forbyana*, *ferruginea*, *rugosa*, *cotinifolia*, &c.

The Members, numbering 26, dined at the Plough Inn. After dinner, a catalogue of willows was produced, which at one time were growing at Carham Hall, and were collected by Mr. Hodgson Huntley about 30 years ago. These willows and their varieties numbered 280.

The following were proposed as new Members,—Dr. George Archbold, Norwich; Mr. Thomas Hownam, of Briery Hill, Dunse; and Miss Langlands as an Honorary Member. The thanks of the Club were unanimously voted to Mrs. Spoor for the presentation of the late Mr. Tate's papers.

During the day the President and two other members paid a visit to the Queen of the Gipsies, who lives in a very nice, tidy, clean, well-furnished cottage in Kirkyetholm. She informed us that she was elected Queen, November 16th, 1861, having succeeded her uncle, William Faa. She said her name was that given at her baptism, Esther Faa Blythe. She clearly thought that her mother had committed an offence against the tribe when she married Blythe, who did not belong to the royal race. I conclude she must have followed her mother's footsteps when she married her husband, Rutherford, who belonged to Jedburgh, and was not a gipsy; for she never once alluded to him in our conversation, though she told us she had had twelve children. She is certainly very fair for a gipsy; has short, small delicate hands; her feet are the same, and her gait in walking has a litheness which, I am informed by one able to judge, is not seen in the natives. She cannot tell an ordinary story without great action of hands and arms. One daughter lives with her, but is staid and quiet in her manner. Her children are all darker than the generality of dark persons. She has several brothers and sisters alive, who are very dark, unmistakable gipsies. Her sister Helen is the only one my informant has seen with the dark streak at the root of the eye-lashes. The eyes of all are black. The Queen said that all her children spoke Rommany equally well as English; but from what she said subsequently I gathered that they did not keep up the practice.

This subject of the Gipsy has always been one of much interest to myself. By Statutes 1 and 2 Philip and Mary, and 5 Elizabeth, it became felony, without benefit of clergy, to be found in fellowship with gipsies; and Sir Matthew Hale states, that at one Suffolk assizes no less than thirteen gipsies were executed upon these statutes. Their ancient history is veiled in obscurity; but their features and language remain, after hundreds of years, to this present moment. They are swarthy in complexion, with very dark, long eyes, black hair, and rather an oval face—clearly of an Eastern origin. Many of their words are identical with words used in India at this time by the natives—such as, *pane*, water; *bal*, hair; *baura*, large; *kalo*, black; *churi*, knife; *dur*, far; *sham*, evening.* Dr. Knox says they very rarely intermarry with other races, so far as the females are concerned, but the male has no such scruples. He describes a young gipsy he saw at Kirkyetholm. She was about 16, and the finest specimen of the race he ever saw—features regular; eyes and hair, black. Even in the best specimens, the mouth is too large, and the upper jaw, as in the Jewess, quite disproportioned to the lower jaw and to the rest of the features. The lips are large, and partake of the African character. To detain her at the door, he asked her the way to the head of the College water. She raised her fine arm to point out the mountain path. On the inner side of the arm there stood a circular leprous spot, not to be mistaken. Quick as thought she observed, by a look I gave my friend, that the spot had been noticed by me, and as suddenly withdrew her arm retiring within the hovel immediately. He adds, “they are dying out; they do not work, and like to live on the industry of others; they have found out the great secret, that they can live by the labour of others.”

At Cherrytrees, that warm and sunny abode of Mr.

* WORKS ON GIPSIES:—Hoyland’s “Survey of the Gipsy;” Geo Borrow’s “Gipsies in Spain;” “English Gipsy Songs, in Rommany, with English Translation,” by Chas. Leland, Professor Parker, and Miss Janet Tuckey, 1875 (Turner & Co., Ludgate Hill, London).

Boyd, we saw a specimen of *Pinus nobilis*, only 10 feet high, with three large full-grown cones.

Few events of note have occurred during my year of office. We have to be thankful for uniformly, unusually fine days. In retiring, I have to thank you all for your kindness to me as your President. At the first meeting of the year I was unavoidably absent, being at the time at Hastings. Without the aid of your excellent secretaries it would have been impossible for me to have given you a sketch of our proceedings. It is my painful duty to record the deaths of some of our members, viz. :—

(1.) Sir William Jardine, Bart., of Applegirth, who was elected Sept. 19, 1832, and died, aged 74, at Sandowne, Isle of Wight, Nov. 21, 1874.

(2.) William Dickson, Esq., F.S.A., of Alnwick, who was elected October 15, 1851, and died May 14, 1875, aged 76.—Both of these have officiated as Presidents.

(3.) Rev. James Middleton, M.A., Lauder, elected Sept. 30, 1869, and died 26 Dec., 1874, aged 40.

(4.) Rev. John R. Scott, Amble, elected Sept. 26, 1871.

(5.) Miss Elizabeth Hunter, one of the honorary members, the discoverer of *Agaricus caperatus* of Flora Danica, t., 1675, in Britain; who communicated to Dr. Johnston several other rare plants recorded in his "Flora," or in the Club's "Proceedings."

Before I retire from the honorable position in which you have placed me, allow me to make a few remarks which I think if carried into effect, might be of benefit to the Society which has now existed for 44 years.

It has been suggested that a regular record should be kept of the *famous trees* and the *large trees* within the boundaries of the Club. In the Tyneside Naturalists' Club for Northumberland and Durham, there are 107 Subscribers to an illustrated Catalogue of remarkable trees, the subscription is 5s., and each subscriber received for last year, 4 photographs of trees, and 2 extra trees presented gratis by Mr.

Ralph Carr-Ellison. At one of our Meetings, Sir Walter Elliot suggested that Members should contribute at their own expense, lithographs or photographs of celebrated Border Trees. Should this seem desirable, I should submit that a small Committee be elected to carry out the wishes of the Club.

I also think the Club might do something more in the way of Meteorology. At present there are only two returns of rain, one from Glanton, the other from North Sunderland, and through the kind perseverance of Mr Collingwood and Mr. Simpson, we have been indebted to them for the rainfall for a number of years. Records of temperature of a remarkable character might be kept, but great care should be taken in the selection of good instruments. Again a small committee might be chosen, to draw up a code of laws for observers, as to the position of instruments, rain gauge, thermometers, barometers, wind gauge, height above the ground, &c., and these might be recorded in a systematic way each year. I may here observe that I never suffered so much in my garden from frost as I did last winter. I lost entirely the following shrubs:—Rosemary, *Garrya elliptica*, *Ceanothus Lobii*, 12 feet high on a south wall; Lauristinus, Gum Cistus. Those killed to the root but have recovered were Sweet Bay and *Euonymus Japonica*.

I am not sure whether Books have ever been presented to the Club, or presents of any kind. If so, where would be the most suitable place to deposit them? There is I believe a Museum at Berwick, would not this be a fit place for all presents to be placed? Were there a fit place to deposit them, in all probability many objects of curiosity and interest might be sent there for the benefit of the Members of the Club and of the public. There is another object I have long had in view and which I have begun myself, that is to write an account of the parish where one resides. A good deal of such work would necessarily fall to the lot of the clergyman of the parish. On mentioning this subject at our meeting at East Linton, I was told that

this had been done in every parish in Scotland. Since then I have examined this work called the "Statistical Account of Scotland;" but this partakes more of the character of a gazetteer than what I think would be required for our Club. These accounts vary very much, some are very elaborate, being divided into five sections, embracing the Topographical appearance of the parish, all branches of Natural History, its Civil History, its Population, including the character of the people, then the Industry, Agricultural and Rural Economy, and lastly the Parochial Economy. In Northumberland we have three very imperfect histories of the County, and the last and fourth history is a mere fragment, very excellent as far as it goes. Now if some one in each parish would endeavour to draw up its history, part of which would be most suitable for our transactions; one person might be found to take charge of the geology, another of the natural history including all branches, recording what birds have been shot, what plants and reptiles and animals and insects have been seen; some one else might take charge of the names of places, and fields and springs, trying to give the derivation of the words, which is a most fascinating study. Ancient buildings, such as Churches, Peel houses, and British and Roman Camps, Folk lore, legends, local songs, history of strange and remarkable men, some one else might treat of.

We have a list of landowners in the county of Northumberland in the year 1663. Taking it as a basis, it would be interesting to trace if possible the different families into which properties have passed to the present time. Again, Parish Registers often contain matter of great interest. *Certain* portions of such a parish history might be of great value to a Society like ours, and if extended might be made of use in case Mr. Hodgson's history was ever to be finished.

The only duty now incumbent on me is to nominate my successor, who is Archibald Campbell Swinton, Esq., LL.D., of Kimmerghame.

Obituary Notice of William Dickson, Esq., F.S.A., Clerk of the Peace for the County of Northumberland. By the REV. WILLIAM PROCTER, M.A.

IN the course of the year, the Club has lost one of its most valued members in Mr. Dickson, who joined it in 1843, and was President in 1857. He has left some very interesting papers in our "Proceedings" on Antiquities and Local History. The "Notes on Bamburgh" in the "Proceedings" for 1872, are an instance, (like many in his unpublished papers) of his happy mode of correcting popular errors by an accurate statement of facts.

There is an old tombstone in Greenlaw churchyard, bearing the following inscription:—

" HERE LIES PATRICK DICKSON
OF HOWLAWRIG, SECRETARY TO
THE RIGHT HONOURABLE PATRICK
EARL OF MARCHMONT, WHO DIED
THE 16TH DAY OF MAY, 1729, AGED
64 YEARS. AND DOROTHY CAMPBEL
HIS WIFE, WHO DIED THE 29TH DAY
OF APRIL THE SAID YEAR, AGED
36 YEARS."

The above were the parents of Patrick Dickson, who became proprietor of Whitecross, in Berwickshire, and of Spittal Hall Estate in the parish of Tweedmouth.

William Dickson, eldest son of Patrick, was born at Berwick-upon-Tweed, on the 6th April, 1799. On the 7th June, 1825, he married Sarah, a daughter of Mr. Thorp, (son of Robert Thorp, Archdeacon of Northumberland,) whose partner he became, and whom he succeeded in 1843, as Clerk of the Peace for the County of Northumberland.

Mr. Dickson was a freeman of Berwick, having been admitted on the 7th April, 1820. He was a Justice of the Peace for Berwickshire; in respect of the estate of Whitecross. He also held several offices relating to the County of Northumberland; and also the post of chairman of various public bodies in the town of Alnwick. To him, the town of Alnwick is indebted for Pottergate granite fountain; and other improvements made in that Street. After the failure of the Northumberland and Durham District Bank, he founded the Alnwick and County Bank, which with its

several branches, contributed greatly to the public convenience.

As a man of business, Mr. Dickson was renowned for diligence, dispatch, and accuracy. Much engaged in the management of large estates, and having many important matters always requiring attention, he never withheld advice or assistance from the poorest, whose cases were often as intricate as others, but he always got them arranged to their satisfaction. Possessing the rare faculty of concentrating his mind, in the midst of many avocations, on one subject at a time, and of following it up till it was settled, he discharged with great ability, the duties of many public offices, along with much private business. On the 6th of May, 1875, he attended an Adjourned Sessions of Magistrates at Newcastle. He had then a slight cold, which became a serious illness, and he died at Alnwick on the 14th of the same month, in the 76th year of his age.

Mr. Dickson was esteemed and respected by all classes of society. On the day of his death the Alnwick Local Board of Health met, and unanimously adopted a resolution, expressive of their deep regret at his death, their appreciation of his long and invaluable public services, their esteem for his public and private worth, and their intention to follow his remains to the place of interment. The other public bodies in Alnwick, including the Chamberlains and Common Council of the Borough, adopted similar resolutions; and thus, notwithstanding his simple, unambitious character, his funeral was in fact a public one, attended by hundreds of real mourners uninvited.

At the first Sessions of the Justices of Northumberland after his death, Mr. M. W. Ridley, M.P., the Chairman, in opening business, said, they would not be doing their duty, if they did not express their deep sense of regret at the loss they had sustained in the death of the late Clerk of the Peace, Mr. Dickson. He thought the Bench ought to place on their minutes a resolution recording the great services which Mr. Dickson had rendered to the County; he moved the following resolution:—"That this Bench do record their deep sense of the long and valuable services rendered to them by the late William Dickson, Esq., as Clerk of the Peace for the County, and of the great loss they have suffered by his lamented death; and they further desire to express their sympathy with his widow and family on the

bereavement they have sustained ; and that a copy of this resolution be forwarded by the chairman to Mrs. Dickson." Mr. Burdon Sanderson, in seconding the resolution, said ; " The admirable manner in which Mr. Dickson had conducted the business, made him a pattern for all Clerks of the Peace throughout England. It would be impossible to find in England, one who had discharged his duties with more ability, and kept the County in a better state. On every subject of expenditure, and in all things, they had the advice of Mr. Dickson, who knew how far they could go, and who always kept them within proper limits ; and not only the Justices but the Ratepayers would feel that they had lost a gentleman who had given them the greatest assistance, and really advanced their interests in the greatest degree." The Resolution was agreed to unanimously.

Memoranda. By JAMES HARDY.

A notice of Mr. Dickson would be imperfect without allusion to his literary and antiquarian tastes, which he occasionally found opportunity to exercise, amidst his many more serious and important occupations. Mr. Dickson was a Fellow of the London Society of Antiquaries, and of the Antiquarian Society of Newcastle. He was a member of the " Surtees Society," and the " Grampian Club." In the west of Scotland, where latterly he resided during summer at Underwood Cottage, Dunoon, he cordially welcomed and joined a kindred society with our own—" The Glasgow Society of Field Naturalists." One of his first publications " The Wards, Divisions, &c., of Northumberland," was in some respects professional ; although the antiquarian bias of the author is evinced by the ancient names of places being arranged from the original Records. It was a complete picture of the County in 1833. The book was greatly valued by the profession. Mr. Clayton Clayton, the conveyancer, said it was most useful to him—and that he never settled a draft without referring to it. Higher in importance to the county historian, are the " Pipe Rolls," in continuation of the Rev. John Hodgson's series. Only the first part was printed, and this is accompanied by a translation ; the subsequent portions are lithographed, and without translation but with occasional appendices : the whole, with the Index,

extending to 170 pages, quarto. There is a corrected pedigree of Muschamp, Lord of Wooler, at p. 155. Another of his useful local memorials, displaying his wonted research, joined to a pleasant vein of writing, is his "History of Alnmouth," in five chapters. A sixth Chapter, though intended, was never accomplished. His papers in the Club's "Proceedings," are far too few in number; and it is to be regretted that his pen had not had more frequent practice on subjects with which he was intimately acquainted; towards which also his inclination led him; while, moreover, he had the advantage of ready access to valuable materials for those inquiries in which he was so competent. Mr. Dickson's zest for poetry is apparent from his writings, but it will be new to many, that he also occasionally composed in verse. Some lines on Bamburgh, in his "Address," (vol. iv. p. 14) are introduced in such a way, that no one would infer his being their writer. He took a great interest in the well-being of the Club, and was repeatedly making inquiries about its prosperity and stability. "I am now," he writes, "an old member of the Club, but rather too old for long walks. I am not the active man I was—73 tells a tale. I like to meet the Club when I am able. It must be kept up, it is the father of all Field Clubs." Among other suggestions for the improvement of the "Proceedings," he proposed that members who did not write papers, might still aid the Club's endeavours by being at the expense of illustrative plates. It was with this view that he contributed the engraving of Wooler to our last volume; and he offered again to reproduce his pretty vignette of Alnwick Castle, which appeared in Vol. IV., should the Club at any time have occasion for its use. Although located most of his life-time in Northumberland, Mr. Dickson had a borderer's fondness for his native district. In 1872 he writes: "I have been long connected with Berwickshire. I am now one of the oldest Justices of the County—and I like to hear of its manors, and inhabitants, and everything connected with the Merse;" and there are other affectionate references to Hume—Coldingham—and Greenlaw—the domiciles of his ancestry. In another communication he gives the following hints on Indexing, which may be useful for the saving of time of hard workers. "I have a curious method of Indexing. I go straight ahead—on slips of paper—putting the subject and page on—and when all is done, I cut them all to pieces—

then I part all the A's, B's, C's, and so on—and after that I sort the A's, B's, &c., and gum them to sheets. When done, I revise the whole. The Index is then ready to copy or to print from. The advantage is, you can take it up and leave it off—and there is no strain on the brain—it is just mechanical work.”

Writing of his paper on Bamburgh, he makes these remarks, some of which are worth attending to, by contributors to the printed records of the Club.

“The object of that paper, was not to attempt any History of the famous castle of Bamburgh, but merely to shew, that all historians have been in error, as to the way the estates came into the possession of Lord Crewe; as to which they have followed each other with the same statement, each varying a little, still however sticking to the Rebellion.—Bamburgh was a Royal Castle, and I have such a number of Charters, Warrants, and Orders from the Crown.—Every trifling repair required an order from the King.—I thought it best, not to do more; but adhere to one point, rather than attempt a History.—Little articles are more suited to the pages of the Proceedings of the Club, from which future writers may glean facts which cannot be had elsewhere. These are the little things which Dr. Johnston was anxious to fix *in transitu*, rather than to have long and elaborate articles.—Such articles are valuable, but few have time to spare for them, but you can always dash off some little tit bit, without taking up much space or wearying either the writer or the reader.”

The following is perhaps not a complete list of his writings, but it is all that inquiry elicits.

1. The Wards, Divisions, Parishes, and Townships of Northumberland, according to the ancient and modern Divisions, shewing the Annual Value and Population of each Parish and Township maintaining its own Poor, from the Returns of 1831; also the Places for which Surveyors of Highways and Constables are appointed respectively, and by whom appointed, compiled from the Records and other authentic sources.—Alnwick, 1833, 4to., 104 pages.

2. Record of the Proceedings relating to the Address to Her Majesty, Queen Victoria, from the Inhabitants of the Borough of Alnwick, in Northumberland, presented 29th Aug., 1850.—Newcastle, 1850, 4to, 4 leaves.

3. Notices of a Chantry in the Parochial Chapelry of Alnwick, dedicated to the Virgin Mary.—Hist. Ber. Nat. Club, vol. iii., p. 67.—And separately—London, 1852, 8vo., 12 pages.

4. Four Chapters from the History of Alnmouth.—Newcastle, 1852, 4to., 26 pages.

5. The History of Alnmouth, another Chapter shewing the past and present state of the Church.—Alnwick, 1867, 4to, pp. 27—69.

6. The Pipe Rolls for the first, second, and third years of the reign of Edward the First, for the County of Northumberland, A.D. 1273, 1274, 1275. In continuation of the series in Hodgson's History of the County: with a Translation and Notes.—Newcastle, 1854, 4to., 54 pages.—Arch. Æliana, vol. iv. pp. 207—260.

7. Ibid for the fourth, fifth, and sixth years, A.D. 1276, 1277, 1278. Ibid, 1860, lithographed, 4to., pp. 55—90.

8. Ibid for the seventh, eighth, and ninth years, A.D. 1279, 1280, 1281.—Ibid, 1860, pp. 81—129.

9. Ibid for the ninth, tenth, eleventh, and twelfth years, A.D. 1282, 1283, 1284, with Index.—Ibid, 1860, pp. 130—170.

10. Bills of Cravings of the Sheriff of Northumberland for 1715, of Expenses incurred by him relative to the Rebellion in that year—Arch. Æliana, vol. iii. pp. 11—13, 4to.

11. Cronica Monasterij de Alnewyke et quodam Libro Cronicarum in Libraria Regalis Cantabrigiæ de dono Regis Henrici VI Fundatoris; with English Translation.—Ibid, vol. iii. pp. 33—45.

12. Contents of the Chartulary of Hulne Abbey, in the Parish of Alnwick, founded by William de Vescy, A.D. 1240, 24 Henry III.—Ibid, vol. iii. pp. 46, 47.

13. Notice relative to the Hospital of St. Leonard, in the Parish of Alnwick:—Ibid, vol. iii. pp. 48—50

14. The Hospital of St. Leonard, in the Parish of Alnwick. (Addition to former Paper)—Ibid, new series, vol. i.

15. The Annual Address, delivered at Alnmouth, on the 24th of September 1857.,—Hist. of Ber. Nat. Club, vol. iii., pp. 1—50.

16. Notes on the Marsh Samphire.—Ibid, vol. iv., pp. 65, 66.

17. Rothbury and its Saxon Cross.—Ibid, vol. iv., pp. 66—75.

18. Roman Altar found at Gloster Hill, in the Parish of Warkworth.—Ibid, vol. iv., pp. 86—88.

19. Notes on Etal.—Ibid, vol. iv., p. 179, &c.

20. Notes to correct Errors as to the Manors of Bamburgh and Blanchland.—Ibid, vol. vi., pp. 331—334.

On the Birds in the neighbourhood of Paxton. By GEORGE MUIRHEAD.

1. GOLDEN EAGLE. *Aquila chrysaetos*. An Eagle, evidently of this kind was killed near Hutton Mill, on the Whiteadder, about forty years ago. It was observed feeding on the carcass of a horse, at the side of the river, and was shot by the late Mr Hastie, tenant of Hutton Mill. The Rev. Dr. Kirke, of Hutton, kindly obtained for me the above information.

2. PEREGRINE FALCON. *Falco peregrinus*. A Peregrine Falcon frequented the tall trees at the side of the river Tweed here, in the summer of 1871. I do not know of any other instance of the Peregrine having been observed in this neighbourhood.

3. MERLIN. *Falco aesalon*. This beautiful little Falcon is occasionally seen about Paxton. I have noticed two or three flying about the plantations, during the course of the last three or four years. The gamekeeper at Paxton House shot a male in full plumage in Finchy wood, at the side of the Tweed, in February 1873. He also killed a male in immature plumage in the Cow Dean Wood, in the spring of 1872. I have not seen the Hobby (*Falco subbuteo*) either in Berwickshire or Haddingtonshire. I observe that Dr. Turnbull does not include it in his "Birds of East Lothian."

4. KESTREL. *Tinnunculus alaudarius*. The Kestrel is common in this neighbourhood, and is often seen hovering over the fields and young plantations, in search of prey. There was a Kestrel's nest in the Old Heronry Wood, in the summer of 1874. It also breeds in the high rocks at the side of the Whiteadder, near Tibbie Fowler's Glen.

5. SPARROWHAWK. *Accipiter nisus*. The Sparrowhawk is very often seen in the woods here. The wood at Finchy, at the side of the Tweed, which consists of high trees growing on a steep bank sloping to the south, and which is usually frequented by great numbers of small birds, is one of its favourite hunting grounds. I knew of two Sparrowhawk's nests in the summer of 1874. One was built on a Scotch fir-tree not over thirty feet high, in the small plantation which lies immediately to the west of Paxton South Mains Farm Steading. When the nest was discovered, about the middle of June, there were five eggs in it. The other nest was in the Wester Strip in Paxton House Policy, and it was not found out till the young hawks were heard crying for food. On examining the nest, I found it full of the remains of a great number of small birds.

The Sparrowhawk used to build regularly every year, in the Well Mire plantation, at the side of the Whiteadder, near Paxton Village, but it has not been observed to do so there for the last two seasons. I notice male Sparrowhawks flying about here much more frequently than female.

6. HENHARRIER. *Circus cyaneus*. I saw a female Henharrier in a plantation at the side of the Tweed here on the 16th October last. The bird rose from a tree on which it had been sitting apparently asleep, for it allowed me to approach within thirty yards, and hovered away over in the direction of the Whiteadder. It looked somewhat like a seagull in its flight. The Henharrier is very rare in this locality, the above being the only instance of its occurrence which has come under my observation during a residence of five years. I have been told by old people that it used to frequent the marshy ground at Billie Mire, in considerable numbers about 60 years ago, and that its nest was then often found there amongst the rushes.

7. LONG EARED OWL. *Otus vulgaris*. This Owl was observed several times in the plantations here, in the summer of 1874. I rose one out of a large hawthorn tree, close to the side of the Tweed, in the month of August. It was sitting along with a Tawny Owl, in the thickest part of the trees. In the following month of September, I saw one in the Silver Fir Strip at Nabdean.

The Short Eared Owl, (*Otus brachyotus*), does not appear to visit this neighbourhood.

8. WHITE OWL. *Strix flammea*. I have been told by the forester here, that the White Owl used to breed regularly in the high rocks at the side of the Whiteadder, near Clarabad Quarry, but it has not been noticed there for several years. One was caught in a rat trap, in the stackyard at Paxton North Mains, several years ago. A fine specimen of this Owl was shot at the side of the Whiteadder, near Edrington Mill, in October 1875.

9. TAWNY OWL. *Syrnium aluco*. The Tawny Owl is plentiful in the wood at Paxton, and sometimes several may be heard hooting at night. It builds its nest every year in the Wester Strip, in the policy. It has been known also to have its nest on a tall thickly branched larch tree, near the Lover's Tryste, and upon one occasion there was a Wood Pigeon's nest on a branch of the same tree, not far from the Owl's. When a boy went up to get the young Owls, the pigeon flew off her nest, and he found that she had two eggs.

10. TENGMALM'S OWL. *Nyctale funerea*. A specimen of this rare bird was killed at Berwick, in February 1874, and is now preserved in the Museum there.

11. GREAT GREY SHRIKE. *Lanius excubitor*. A Great Grey Shrike was shot near West Ord, in November 1873. I have a beautiful specimen which was shot at Bughtknowe, in the parish of Humbie, East Lothian, in the winter of 1869.

12. SPOTTED FLYCATCHER. *Muscicapa grisola*. This bird is found sparingly distributed about the plantations at Paxton. There is a nest every year near the Avenue Bridge.

13. **PIED FLYCATCHER.** *Muscicapa atricapilla*. The Pied Flycatcher is evidently a very rare visitor to this neighbourhood. I noticed a male at the side of the plantation at Finchy, about the second week of May, 1872; which is the only instance that I am acquainted with, of this bird having been observed in this immediate locality.

14. **DIPPER.** *Hydrobata cinclus*. This lively bird is numerous on the Tweed and the Whiteadder, at all seasons, except when the water is covered with ice. I have frequently heard it singing on the Whiteadder, during the winter time. The note which it utters while flying rapidly along the course of the stream, never fails to remind me of the pleasant trout fishing days of spring and summer.

15. **MISSEL THRUSH.** *Turdus viscivorus*. The Missel Thrush is plentiful at Paxton, and in the policy every year. There was a nest in a tall oak tree here, in the spring of 1872, and one morning when I approached the tree, I was surprised to hear the old birds screaming very loudly, and to see them flying round the tree, and darting into it every now and then. On going forward, I observed a squirrel near the nest, and the birds kept darting down at it till they forced it to descend to the ground.

A Missel Thrush built its nest in a low bush on the lawn near my house, in the spring of 1874. The bush was not over 5 feet high.

16. **FIELDFARE.** *Turdus pilaris*. This bird may be seen flying in small flocks about the fields at Paxton, late in autumn. They were very long in going away to their breeding quarters in the spring of 1873, for I noticed large flocks frequenting the high trees above the Primrose Bank, as late as the first week in May. They were then very wild and shy. 22nd December, 1874.—The Fieldfares are suffering very much at present from the hard frost; they are found just now in the plantation at Finchy, in great numbers. It slopes to the south, and the sun melts the snow more quickly there than in other woods, and the birds search for food amongst the fallen leaves.

17. **SONG THRUSH.** *Turdus musicus*. The Thrush is very plentiful at Paxton. I observed great numbers feeding in the turnip fields in the autumn of 1874. Mr J. E. Harting says in the "Field" of 31st October, 1874, that he thinks that the Thrushes which are seen feeding in such numbers in the turnip fields in autumn, are on their way southwards. It is very probable that Mr Harting is right in his surmise, for we see great numbers of Thrushes in the partridge shooting season amongst the turnips, and shortly afterwards there are only a few.

22nd December, 1874.—Although I constantly notice plenty of Redwings and Fieldfares about here at present, I do not see above one or two Thrushes amongst them.

18. REDWING. *Turdus iliacus*. The Redwing frequents this neighbourhood in considerable numbers, coming in October, and flying in flocks with the Fieldfares, during the autumn, winter, and spring. The high trees above the Primrose Banks are a favourite resort of theirs in autumn, and the plantation along the Banks of the Tweed at Finchy during snowy weather in winter. I have found several Redwings dead this week (22nd Dec., 1874) from the severity of the weather. One comes every day, and searches for food amongst the gravel close to my house, where there is no snow lying.

19. BLACKBIRD. *Turdus merula*. There are more Blackbirds here, than I have noticed anywhere else, and they whistle so loudly during the spring evenings in the flower garden, that the whole air resounds with their melody. I have sometimes heard at least half a dozen whistling there at one time. Near the waterwheel, above the Avenue Bridge, is also a great resort of theirs in the spring evenings.

20. HEDGE ACCENTOR. *Accentor modularis*. The Hedge Sparrow is common about Paxton. I have noticed that a good many frequent the bushes at the side of the Whiteadder, near its mouth, when snow lies on the ground in winter.

21. REDBREAST. *Erythaca rubecula*. This favourite bird is numerous here. Mr St. John, in his "Natural History and Sport in Moray," mentions that he has known the same Robin return for several winters in succession to a house. I have observed a similar instance of its habits.

22. REDSTART. *Ruticilla phoenicurus*. Several pairs of Redstarts build their nests every summer in the Policy. There was a nest in the Wester Strip, in 1872. I believe the Redstart has come only recently to this neighbourhood. I have been told that it was first noticed here, four or five years ago, and being a strange looking bird, it attracted the attention of the workpeople.

23. STONECHAT. *Pratincola rubicola*. The Stonechat frequents the waste ground near the mouth of the Whiteadder, in the autumn months; and I have seen it several times on "Orrit," which is a small island on the Tweed near Gainslaw. When looking for Snipe there, on the 25th November last, I saw two Stonechats flying about the island, and alighting on isolated reeds and thistles and occasionally on molehills. The salmon fishermen say that it breeds about the mouth of the Whiteadder in summer, but I have seen it there in autumn only.

24. WHEATEAR. *Saxicola cinanthe*. I have occasionally observed Wheatears about the fields here, in spring and autumn. They were in every instance females or young birds. I have seen no males in full plumage in this neighbourhood.

25. SEDGE WARBLER. *Salicaria phragmitis*. One or two pairs of this interesting bird, breed annually at Tweedside, in

the thick hedge which runs along the side of the River opposite Paxton House. I frequently heard the Sedge Warbler singing there, in its peculiar manner, in the summer of 1873 and 1874.

26. BLACKCAP. *Sylvia atricapilla*. This melodious bird is numerous in the Policy Woods in summer, where the rich notes of the male may be heard during the breeding season. It builds mostly in the bushes about the Old Heronry, and in the Cow Dean, near Avenue Bridge. Several pairs also frequent the Well Mire plantation at the side of the Whiteadder, and nestle there. The young Blackcaps after they are able to fly seem to feed a great deal on elderberries.

27. WHITETHROAT. *Sylvia cinerea*. Several pairs of this attractive bird breed every year amongst the bushes at the side of the Tweed, near the Boathouse. I have not observed the Lesser Whitethroat (*Sylvia curruca*), nor the Garden Warbler (*Curruca hortensis*) about here.

28. WOOD WARBLER. *Sylvia sibilatrix*. I have noticed the Wood Warbler seldom in this neighbourhood. I saw one in the shrubbery at Wedderburn Castle, near Dunse, about the middle of May, 1874.

29. WILLOW WARBLER. *Sylvia trochilus*. The Willow Warbler is very plentiful in the woods here. It builds in the Wester Strip, in the policy, every year.

30. GOLDEN CRESTED REGULUS. *Regulus cristatus*. The Golden Crested Wren frequents the woods here, at all seasons of the year. It may generally be observed amongst the tops of the trees, in the Wester Strip.

31. GREAT TIT. *Parus major*. The Great Tit is not plentiful but may be seen in the plantations all the year round. I noticed them most frequently in the Cow Dean plantation, near the Badger's Holes.

32. BLUE TIT. *Parus cæruleus*. This lively little bird is our most common Titmouse, and frequents the woods, hedges, and farm-yards.

33. COLE TIT. *Parus ater*. The Cole Tit is generally to be seen flying about the trees in the Wester Strip, searching for food. It appears never to be a moment at rest, and its attitudes when it is hunting for insects on the branches of the Scotch and spruce firs, are very amusing. It is the Titmouse which I see most frequently in the plantations.

34. MARSH TIT. *Parus palustris*. I have noticed this Titmouse in the woods, in this neighbourhood, but it does not appear to be plentiful.

35. LONGTAILED TIT. *Parus caudatus*. The Longtailed Titmouse is pretty numerous in the plantations here, where it generally flies about in small flocks amongst the tops of the trees. Its nest has been found several times at the Primrose Bank.

There was one in a yew tree, near the Avenue Bridge, in the summer of 1874.

36. **PIED WAGTAIL.** *Motacilla Yarellii*. I observed large flocks of the Pied Wagtail at Tweedside, in the month of September, 1874. They roosted among the reeds near the mouth of the Whiteadder, and appeared to me to be migrating southwards. For a short time afterwards, only an occasional Wagtail was to be seen, where there were great flocks the previous week.

37. **GREY WAGTAIL.** *Motacilla sulphurea*. A pair of Grey Wagtails frequented the burn which runs through the Old Heronry Wood, in the summer of 1874, and I think they built their nest there. It is by no means plentiful in this neighbourhood; only a few pairs being seen frequenting the sides of the Tweed and Whiteadder, or about some of the small burns. I have not observed Ray's Wagtail, (*Motacilla campestris*) nor the Grey Headed Wagtail, (*Motacilla flava*), in this vicinity.

38. **TREE PIPIT.** *Anthus arboreus*. Two or three pairs frequent the plantations of ash and elm trees at Tweedside, near the Boathouse, every summer. Finchy Wood is also a resort of the Tree Pipit. One morning in June, 1873, my attention was attracted to one of these birds in a strip of plantation near my cottage. The bird flew up a short distance in the air from the top of the tree on which it was sitting, and then extended its wings backwards like a pigeon, and came slowly down to its perch, singing all the time. I notice a sketch of one coming down in the way that I have mentioned, in the background of Yarell's woodcut of the Tree Pipit.

39. **MEADOW PIPIT.** *Anthus pratensis*. The Meadow Pipit or Titlark, is an occasional visitant to Tweedside in the autumn months. I observed several near the mouth of the Whiteadder, during the severe snowstorm, in December, 1874.

40. **SKYLARK.** *Alauda arvensis*. This charming bird is comparatively rare in the immediate neighbourhood of Paxton, but I have heard several singing on Paxton North Mains Farm, near the Tilework. It is more plentiful on the farm of Fishwick.

41. **BUNTING.** *Emberiza miliaria*. The Bunting occasionally presents itself in the autumn months, on the haughs at the mouth of the Whiteadder, where it may be observed perched on the top of the palings and bushes. I have noticed it several times on the roadside hedges, near the National School, on the Berwick road.

42. **SNOW BUNTING.** *Plectrophanes nivalis*. I have not observed the Snow Bunting in this immediate neighbourhood, but, I saw several of these birds on the road above Longformacus, when I was riding across the Lammermuir Hills, from Paxton to Gifford, in the month of January, 1874. When I was crossing the same hills in Nov., 1874, I noticed two large flocks of Snow

Buntings; one flock was near Danskine, and the other near Longformacus. I saw an immense flock of Snow Buntings on the farm of Fairneyside, near Burnmouth, in January, 1871. Mr. Leitch, Fairneyside, informed me on 25th Nov., 1874, that several flocks were frequenting his farm at that time.

43. YELLOW BUNTING. *Emberiza citrinella*. This well known and common bird is plentiful about Paxton.

44. BLACK-HEADED BUNTING. *Emberiza schœniclus*. A few Reed Buntings frequent the reeds at the sides of the Tweed and Whiteadder, and breed there in summer. I have seen the Reed Buntings there at all seasons of the year.

45. CHAFFINCH. *Fringilla œolebs*. The Chaffinch is very numerous here, and large flocks are seen in the autumn and winter months, feeding about the fields, near the plantations.

46. MOUNTAIN FINCH. *Fringilla montifringilla*. The Brambling is a regular autumn and winter visitor to our neighbourhood. Large flocks of these birds frequented the plantation in the Policy, in the autumn of 1874, and fed with the Chaffinches. When the snow came in December, they disappeared, and I saw a few only during the severe weather. It is called here the "Cock o' the North."

21st December, 1875. I have not observed the Brambling here this winter, as yet.

47. HOUSE SPARROW. *Passer domesticus*. The common Sparrow is very plentiful about Paxton. I have not noticed the Tree Sparrow, (*Passer montanus*) here.

48. GREENFINCH. *Coccothraustes chloris*. The Green Finch, or Green Linty, is plentiful. I noticed a number of its nests in a large hawthorn hedge, on the farm of Fishwick, near the side of the Tweed, in July, 1874.

49. SISKIN. *Carduelis spinus*. This bird visited Paxton House Policy in considerable numbers, and frequented the birch trees, during the severe snowstorm of 1870-71.

21st December, 1875. I observed several Siskins feeding on the alder bushes at the side of the Mill Pond at Nabdean, one day about the beginning of this month.

50. LINNET. *Linota cannabina*. The Linnet, or Grey Linty, sometimes comes in small flocks, during the winter, to the waste ground about Paxton Tileworks. I have not noticed it in this neighbourhood during the breeding season.

51. LESSER REDPOLL. *Linota linaria*. This bird occasionally visits the policy of Paxton House, during severe weather in winter, and frequents the birch trees with the Siskins. A good many were observed during the storm of 1870-71.

52. MOUNTAIN LINNET. *Linota flavirostris*. I noticed several of these birds apparently feeding on the seeds of the common avens (*Geum urbanum*), in the Cow Dean Wood, during the very

severe snowstorm, in the end of December 1874. I had not previously observed the Mountain Linnet in this locality.

53. BULLFINCH. *Loxia pyrrhula*. The Bullfinch is rather plentiful in the policy woods here, where it breeds every year. I saw one or two small flocks of ten or fifteen Bullfinches which appeared to be feeding on the seeds of the common avens, in the Cow Dean Wood, during the severe weather in the end of December, 1874.

54. CROSSBILL. *Loxia curvirostra*. A small flock of Crossbills visited the fir plantations in the Policy, in the month of September, 1873, as recorded in the "Proceedings of the Berwickshire Naturalists' Club," for 1873.

55. STARLING. *Sturnus vulgaris*. Great numbers of Starlings roost at night during the autumn and winter months, in the large leafy laurel bushes, in the Flower Garden.

31st. December, 1874. I noticed several Starlings to-day, feeding close to the corn barn door at the farm-steading of Nabdean. They seemed to be very hard pressed for food. I have seen no large flocks about here since the snow came on about three weeks ago. The Starling seems to me to be getting much more numerous, in East Lothian and Berwickshire, than it used to be some years ago.

56. ROSE COLOURED PASTOR. *Pastor roseus*. A specimen was killed near West Ord, many years ago. Its occurrence is recorded in the "Proceedings of the Berwickshire Naturalists' Club."

57. CARRION CROW. *Corvus corone*. Several pairs of the Carrion Crow breed every year on the tall elm trees at the side of the Whiteadder, not far from the village of Paxton. One had its nest on a high Scotch Fir, in the Old Heronry Wood, in the summer of 1874.

58. HOODED CROW. *Corvus cornix*. The Hooded Crow is frequently seen about the side of the Tweed at Finchy, and at the mouth of the Whiteadder, in the winter and spring.

59. ROOK. *Corvus frugilegus*. There is a large rookery in Paxton House Policy, near the side of the Tweed. The Rooks do not generally roost at the rookery at night during the winter months, but come to the trees in the morning and leave in the afternoon. At present (1st. Dec. 1874), great straggling flocks are seen passing east toward the rookery in the mornings about 9 o'clock, and about 3 o'clock in the afternoon they are observed returning to the west. I have not been able to ascertain where they go to in the evening, after leaving the rookery.

60. JACKDAW. *Corvus monedula*. Several pairs of Jackdaws build in holes in the large beech trees near the Avenue Bridge. They are numerous here when the young pheasants are being reared, and are a source of trouble to the gamekeepers, for they

contrive to steal a great deal of the pheasants' food, and he blames them for sometimes helping themselves to a young pheasant.

61. MAGPIE. *Pica caudata*. A pair of Magpies had their nest, and reared their young in the small fir wood immediately to the west of Paxton South Mains farm-steading, in the summer of 1874, and as the young birds were allowed to fly a Magpie is occasionally noticed. They are very attractive birds, and it adds a pleasure to a walk in the plantations to see one flying about.

62. GREAT SPOTTED WOODPECKER. *Picus major*. The forester here saw a Great Spotted Woodpecker climbing up a larch tree in the policy five or six years ago, and one was shot a year or two since, at Gainslaw House near Paxton. Miss Georgina Milne Home lately presented a specimen to the Berwick Museum, which was shot in Milne Graden policy grounds, some years ago.

63. CREEPER. *Certhia familiaris*. This bird is frequently seen climbing up the trees in the plantations.

64. WREN. *Troglodytes europæus*. The Wren appears to have favourite resorts in the grounds. One is near the Boathouse, and another at the Waterwheel, near the Avenue Bridge. A colony of Wrens is to be found in the small plantation near Nabdean, at all seasons of the year.

65. CUCKOO. *Cuculus canorus*. The Cuckoo is only occasionally heard in this neighbourhood in early summer. I have heard it several times in the Wester Strip. A young Cuckoo was brought to me by the gamekeeper, in the month of August, 1873. He had shot it while it was on the wing, mistaking it for a young sparrow-hawk.

66. KINGFISHER. *Alcedo ispida*. Several Kingfishers frequent the Tweed here, during the spring, summer, and autumn months. The Crow Dean Burn, which runs into the Tweed at Finchy, is a favourite resort of this bird in summer, and I think that a pair had their nest near its mouth, in the summer of 1873; for I used to see the old birds there very often. I have noticed Kingfishers occasionally on the Whiteadder, and saw one near the old Bound Road in the middle of December, 1874. I have observed the Kingfisher also in winter, on the burn which runs through the farm of Spital Mains. The pond below the Avenue Bridge, in the policy, is usually frequented by a Kingfisher in the summer time.

67. SWALLOW. *Hirundo rustica*. The Swallow is plentiful about here, and nests in the out-buildings.

68. MARTIN. *Hirundo urbica*. This pleasing bird is seen in moderate numbers about Paxton, and builds in the corners of the windows of some of the houses.

69. SAND MARTIN. *Hirundo riparia*. A colony of Sand

Martins breed in the sandpit at Finchy, every summer. The steep face of the pit is full of their holes.

70. SWIFT. *Cypselus apus*. A pair or two of Swifts may generally be seen high over head in the air, during the summer evenings.

71. GOATSUCKER. *Caprimulgus europæus*. I have heard the Goatsucker uttering its peculiar cry once or twice, in the policy plantations, during summer nights,—and I have also noticed the bird on the wing. It is very seldom heard or seen in this neighbourhood.

72. RING DOVE. *Columba palumbus*. Wood Pigeons in great numbers sometimes frequent the policy woods, and a good many breed there. Their cooing during the spring and summer evenings is exceedingly pleasant to the ear. Considerable flocks come thither in early summer, and appear to feed on the tender young leaves of the beech trees. Great flocks came to feed on the beech nuts, in October and November, 1873. About the middle of the latter month, these flocks were augmented by immense numbers of pigeons, which came from the direction of the sea, along the side of the Tweed. It appeared to me, that they were migratory birds from Norway or Sweden. They came always in long straggling flocks from the direction of Berwick, in the mornings, and were not observed to return in the evenings. Vast numbers of pigeons in continuous flocks, kept passing from the east, over the wood which runs along the high bank of the Whiteadder, near the village of Paxton, for about a fortnight, during the same month; and although many of them were shot every day, the reports of the guns did not seem to alter the line of flight taken by the fresh birds which came.

This year (Oct. 1874) I observe considerable flocks passing over head from west to east in the mornings about 9 o'clock, and returning again in the afternoons about 3 o'clock. By standing on the high ground under their line of flight with a breechloader, a dozen or so may be killed while the flight lasts. They afford tolerable sport, as they are strong on the wing and difficult to kill.

21st Dec., 1875. Very few Wood Pigeons have come here this autumn.

73. TURTLE DOVE. *Columba turtur*. A specimen, evidently a young bird, was shot near Edrington Castle, on the Whiteadder, in November, 1872; and is preserved in the Berwick Museum. Another in the same state of plumage was obtained near Whiteadder Bridge, in November, 1874. I observe Mr. St. John in his "Wild Sports of the Highlands," mentions that he twice saw a pair of Turtle Doves in Morayshire, and in both instances the time when he noticed them was towards the end of autumn. It appears to me to be somewhat singular, that a summer visitor to

the southern and midland counties of England, should have been noticed both here and in Morayshire very late in autumn only.

Mr. Gray, in his "Birds of the West of Scotland," says "All the specimens that have come under my own observation have been procured in autumn or spring." It would seem as if the Turtle Doves seen here and in Morayshire in the month of November, had been bred further north and were on their way southwards; but "Yarrell" in his first edition says,—I do not find any notice of the Turtle Dove visiting any part of Scandinavia or Russia."

Dr. Turnbull in his "Birds of East Lothian," records two instances of the occurrence of the Turtle Dove in that county, one near Haddington in 1837, and the other at Dunbar in 1845.

74. PHEASANT. *Phasianus colchicus*, This beautiful bird is numerous in the policy.

Numbers of Silver Pheasants also frequent the woods.

75. PARTRIDGE. *Perdix cinerea*. The Partridge is rather scarce in this immediate neighbourhood. I have been told that the scarcity is owing to the soil not being suitable for them. It is however, remarkable, that on the adjoining properties Partridges are comparatively plentiful, and apparently there is no difference in the soil or climate from Paxton.

76. QUAIL. *Coturnix communis*. I have a specimen of this bird which was shot on New Farm near Sanson's Seal, several years ago. The gamekeeper of Paxton informed me that one or two quails were shot in the neighbourhood of Reston during the partridge shooting season of 1870.

77. GOLDEN PLOVER. *Charadrius plumbealis*. Golden Plovers in considerable numbers occasionally frequent the flat lying fields to the west of Paxton, in the autumn and winter months. I have seen great flocks about Whitsomehill in the autumn.

21st Dec., 1875. An immense flock visited the grass fields on Spital Mains and Clarabad Farms one day in the beginning of this month, just before the last snow storm. The birds seemed to have alighted while on their way from the more inland parts of this county to the neighbourhood of the sea, for they were seen on the grass fields here only one day, and shortly afterwards I heard that great numbers were frequenting the coast near Berwick.

78. DOTTEREL. *Charadrius morinellus*. I have been informed that a small flock of Dotterels comes every year, about the beginning of May, for a few days, to the high ground on Lamberton Moor, which is four or five miles from here.

79. PEEWIT. *Vanellus cristatus*. Great numbers of Peewits frequent the small marshy islands in the Tweed, in the winter and early spring months. Considerable flocks are occasionally

seen in the fields about here in autumn, winter, and spring. I have not noticed any nests here in summer.

80. OYSTER CATCHER. *Hematopus ostralegus*. The Oyster Catcher is occasionally seen in spring, about the mouth of the Whiteadder.

81. HERON. *Ardea cinerea*. The Heron is comparatively numerous about Paxton, and occasionally four or five roost at night, on the silver fir trees, at the side of the Tweed, in the Old Heronry Wood. Some years ago several young Herons were confined below the trees at the Old Heronry, in a wire netted enclosure, for about a year and a half, for the purpose of inducing them to remain and build their nests on the trees; but, on getting their liberty, they flew away, and did not return to build, or to roost regularly on the trees. The Heron is a very picturesque bird, and adds a charm to the scenery at the side of the Tweed or Whiteadder.

82. CURLEW. *Numenius arquata*. A few Curlews are sometimes to be seen about the mouth of the Whiteadder, but not often.

83. REDSHANK. *Totanus calidris*. I have observed several Redshanks at the side of the Tweed, and about the mouth of the Whiteadder, in the early spring months. The plaintive whistle, which they utter while flying along the course of the river is pleasing to the ear.

84. COMMON SANDPIPER. *Totanus hypoleucos*. Several pairs of the Common Sandpiper breed every year in the Whiteadder, and they also frequent the Tweed. I have seen this bird when wounded, swim on the water, and dive under the surface, apparently with great ease.

85. GREENSHANK. *Totanus glottis*. A fine specimen of the Greenshank was shot by the gamekeeper here, on the Whiteadder, near Edrington Castle, in the spring of 1871.

86. WOODCOCK. *Scolopax rusticola*. A Woodcock or two may generally be found during the winter months in the woods about Paxton. They appear to have their favourite retreats during the day time. I have seen them most frequently in the Well Mire Wood, the Crow Dean Wood, and the Old Heronry Wood; but they also frequent the Wester Strip in the policy, and the Silver Fir Strip at Nabdean. I have been told that they used to be found in small numbers in Clairvale Wood near Paxton Tileworks, before the thick under cover died out or was cut down. I never saw so many Woodcocks about Paxton Woods, as I did during the severe snow storm in the end of December, 1874. They were generally to be found about the sides of the burns in the woods, where the ground was free from frost. I observed that at the beginning of the severe weather, the cocks on being flushed, flew off very rapidly, and were difficult to shoot; but after the weather

had continued severe for a week or two, they seemed to get weak and rose with reluctance from their haunts, and flew slowly, and alighted very soon again, at no great distance from the place where they rose. The burn which runs through the Well Mire Wood and falls into the Whiteadder, never freezes in the hardest frost; and as the ground over which it runs is soft and easily penetrated by the bills of the Woodcocks, it is their favourite resort when snow lies on the ground and the frost is severe.

15th Oct., 1875. 3 Woodcocks seen here to day. First this season.

87. **SNIFE.** *Scolopax gallinago*. During the autumn, winter, and spring months, Snipes in small numbers, frequent the marshy ground about the mouth of the Whiteadder. I have shot five or six there in one morning. After a flood in Tweed, when the ground is soft and muddy, there are always more Snipes than usual. During severe weather in winter, I have observed Snipes feeding about the small burns which keep free of ice.

88. **JACKSNIFE.** *Scolopax gallinula*. A few Jacksnipes are to be found along with the Common Snipe, in the autumn, winter, and spring, about the marshy ground at the mouth of the Whiteadder. I shot a Jacksnipe there in the autumn of 1874, as early as the 21st September.

I have not seen the Great Snipe, (*Scolopax major*) in this neighbourhood.

89. **LANDRAIL.** *Crex pratensis*. The Landrail may be heard in the summer evenings uttering its well known cry in the fields about here, where it breeds.

21st December, 1875. Neither I, nor any of my neighbours to whom I have spoken on the subject, heard the cry of the Landrail here last summer. Several friends of mine in East Lothian also remarked its absence this year from their district. In reply to an enquiry sent by me to the "Field," regarding the apparent scarcity of the Landrail last season, a correspondent stated that he had noticed its absence from his neighbourhood in Devonshire this year.

90. **WATER RAIL.** *Rallus aquaticus*. The Water Rail is occasionally seen during winter in this neighbourhood. One was shot at Nabdean Mill Pond several years ago, and another was killed from amongst some reeds near the mouth of the Whiteadder, in November, 1873.

91. **MOORHEN.** *Gallinula chloropus*. Great numbers of Waterhens frequent Nabdean Mill Pond, and also the side of the Tweed and Whiteadder.

31st December, 1874. I noticed several Waterhens lying dead about their usual haunts, from the severity of the weather; and

have found one or two so weak that they sat amongst the snow and allowed me to take them up in my hand.

92. Coot. *Fulica atra*. The Coot is occasionally seen on the Tweed here. When I was watching for Wild Ducks one evening in December, 1874, at Nabdean Pond, I fired at, and killed a Coot, which came flying rapidly over my head like a Wild Duck, for which, in the gray dark, I mistook it. Coots are never seen in the pond so the birds evidently must have come from the Tweed.

93. BEAN GOOSE. *Anser segetum*. Large flocks of Wild Geese pass over Paxton towards the southeast, in the months of October and November, and generally keep high in the air, far out of the reach of shot. Paxton Tilework is in the line of their usual flight, and a flock was seen by some men who were working there, to alight on one of the high lying fields to the east of the Tilework, in November, 1874. A Wild Goose was shot near the mouth of the Whiteadder, in October, 1874; and from the description which I got of the bird, I have no doubt it was a Bean Goose which had been wounded and had separated from a flock. Twenty Geese were seen sitting in a field on Gainslawhill Farm, near Paxton Toll, one day about the beginning of December last. A Wild Goose was killed out of a flock of three, which alighted on Spital Mains Farm near Paxton, several years ago.

Immense flocks of the Bean Goose frequented the farm of Fenton-barns, near Drem, in East Lothian, in the autumn, winter, and spring months of 1867-68. They began to come to the farm about the end of November, and left in the beginning of April. They used to feed on the grass fields, and winter wheat, and appeared to prefer wheat land after potatoes. I think that besides feeding on the young wheat, they would pick up any small potatoes that had been left lying near the surface of the ground, when wheat was sown. The Geese had favourite fields for alighting upon and feeding, and seemed to prefer one either quite flat, or which had rising ground in the centre, from which they could easily observe the approach of an enemy. They very seldom ventured near any of the edges, but generally fed about the middle of the fields, at a considerable distance from fences, or ditches, and were exceedingly vigilant and wary. Although I tried very often to get within range of the flocks when they were feeding in the fields, I never succeeded in doing so, the Geese always discovering me before I got sufficiently near to use my gun with effect. The only way of getting a shot at them that I found successful, was by marking a flock feeding in one of the fields, from a distance with a telescope, and then going and concealing myself behind a thick part of the hedge of one of the adjoining fields, in the line of flight usually taken by the Geese, when risen from the particular field in which they happen to be feeding. Before

going to my place of concealment I used to instruct a boy in what direction to put up the Geese, and if he managed well, the flock sometimes came straight over my head within fine range. In that way I had the satisfaction of bringing down a Goose occasionally with my gun. The Wild Geese used sometimes to sit all night in the fields when there was moonlight. They generally used to fly to Gullane Sands in the evenings, and return to the fields in the mornings, shortly after sunrise. Fala Flow on the Lammermuir Hills, near Soutra Mains in East Lothian, is a favourite resort of Wild Geese.

I have shot the Pink Footed Wild Goose (*Anser brachyrhynchus*) at Fenton-barns, as well as the Bean Goose, but I have not seen the Gray Lag Goose (*Anser feras*) there.

94. SHELDRAKE. *Tadorna vulpanser*. Small flocks of this beautiful bird have occasionally been observed on the Tweed here, in severe weather, about the end of winter. They were invariably very wild and shy.

95. WILD DUCK. *Anas boschas*. The common Wild Duck frequents the Tweed and the Whiteadder in the neighbourhood of Paxton, in moderate numbers. One of their favourite resorts in the evenings to feed is at "Orrit," a small island in the Tweed, a short distance below Gainslaw House, where there is a considerable quantity of weeds about the side of the river. Another spot where Ducks may be found in the evenings and mornings, is at the side of the Tweed not far from the boat-house in Paxton House Policy, where rushes and other water plants abound. Wild Ducks often sit during the day time on the Whiteadder, near Paxton Tilework, and numbers feed on the haugh above Clarabad Mill at night. The gamekeeper at Paxton and I discovered a Wild Duck's nest in the steep bank of the Whiteadder, near Clarabad Quarry, on the 19th of April, 1873. It had thirteen eggs, and as the bank at the place was very steep, the young ducks, when they were hatched, would have considerable difficulty in getting down to the water in safety. I have found that one of the most successful ways to shoot Wild Ducks, is to go to their feeding places in search of them very early in the morning, before it is quite light. They are generally at that time close in at the river's edge, amongst the rushes, and allow the sportsman to get near before they fly up. A pair or two of Wild Ducks generally breed at "Orrit," and there is occasionally a single brood in a large ditch on Nabdean Farm, which runs into the Mill Pond. During the very severe frost and snow in December last, small numbers of Wild Ducks frequented Nabdean Pond at night, being attracted there by the quacking of a flock of Call Ducks (*Anas allector*) which lives on the pond.

96. TEAL. *Anas crecca*. The Teal is not often seen about Paxton. Several were killed on the Tweed here, three or four

years ago. I shot a female Teal, which rose out of some rushes at the side of the river in the end of November, 1874. I saw a pair of Teal on the pond at Wedderburn Castle North Lodge, about the middle of September last, and believed they had bred on the pond, for I was told that they had frequented it during the summer.

97. WIGEON. *Anas penelope*. The Wigeon is occasionally seen on the Tweed here.

98. EIDER DUCK. *Somateria mollissima*. A male Eider was observed on the river here one morning in the end of December, 1874.

99. SCOTER. *Oidemia nigra*. The Common Scoter is seldom seen on the Tweed here. I have noticed it only once or twice on the river, during the last four years.

100. POCHARD. *Fuligula ferina*. In the severe winter of 1870-71, several Pochards were killed on the Tweed, in this neighbourhood. I shot a beautiful male on the Whiteadder, during the severe weather in the end of December, 1874.

21st December, 1875. A young male was shot by the gamekeeper on the Tweed last week.

101. SCAUP. *Fuligula marila*. The Scaup Duck occasionally visits the Tweed, in severe weather in winter. Several were shot on the river here, in the winter of 1870-71. I did not observe any Scaups amongst the ducks on the Tweed during the snow-storm in December, 1874.

21st December, 1875. Several Scaups—young males and females—have been shot on the Tweed here this month.

102. TUFTED DUCK. *Fuligula cristata*. One or two Tufted Ducks are generally to be seen on the river, during severe weather or early spring. A male in full plumage was shot here in the winter of 1870-71.

103. LONGTAILED DUCK. *Fuligula glacialis*. The Longtailed Duck is a rare visitor to the Tweed. A female was shot on the river at Finchy, in the end of December, 1874. I have never seen the male Longtailed Duck here.

104. GOLDEN EYE. *Fuligula clangula*. It is only during the continuance of very severe weather in winter, that the beautiful male Golden Eye is to be seen on the Tweed; during ordinary weather in the winter season, two or three females, or young males in immature plumage, may be observed swimming on the river. They appear to feed always near the edge where the water is not deep. They dive at short intervals when feeding—sometimes the whole of their number going under the water at once, in which case it is easy to get within range of them. The people here call the female Golden Eyes, "Wigeons."

105. GOOSANDER. *Mergus castor*. Goosanders are occasionally seen on the river here, during winter and spring, but they are generally females, or males in immature plumage. The male in

his splendid full plumage seldom visits us. A male in full plumage was shot by the gamekeeper here, on the Tweed, in January, 1875.

106. LITTLE GREBE. *Podiceps minor*. The Little Grebe is sometimes observed on the Tweed and about the mouth of the Whiteadder, in the winter and early spring months. I saw two on the river here, on the 1st December, 1874.

107. RED THROATED DIVER. *Colymbus septentrionalis*. The Red Throated Diver is sometimes seen on the river in early spring. I knew two instances of this bird having been shot in the neighbourhood of Paxton.

108. CORMORANT. *Phalacrocorax carbo*. Sometimes a Cormorant comes up the Tweed from the sea. The gamekeeper here, shot one which was sitting on a tall tree at the side of the river, in the winter of 1871.

109. BLACKHEADED GULL. *Larus ridibundus*. This beautiful Gull may be seen flying about the river in autumn and spring in small numbers.

110. KITTIWAKE. *Larus tridactylus*. The Kittiwake is often seen on the river here, in summer, swimming about and washing its plumage. Gulls seem to prefer alighting on the open and shallow parts of the river, such as below Finchy, where the Tweed is broad and not deep, and where there are no trees on its banks.

111. COMMON GULL. *Larus canus*. The Common Gull comes to feed in the fields about here in the autumn, winter, and spring months. Sometimes large flocks are seen sitting on the grass-fields.

112. LESSER BLACKBACKED GULL. *Larus fuscus*. The Lesser Blackbacked Gull is occasionally seen on the Tweed and Whiteadder, in this neighbourhood.

*Notice of the Life of the Rev. Abraham Robertson, D.D.,
F.R.S., Savilian Professor of Geometry, and afterwards
of Astronomy, Oxford.*

SOME particulars of the early life of Dr. Abraham Robertson, a native of Berwickshire, were introduced to the knowledge of the Club, by one of its members, very many years ago; but a request that they should be formed into a memoir, was never complied with. See Club's "History," vol. i. p. 183. (July, 1839). It appears from this, as well as from notices in the Botany of the Eastern Borders, that the founders of the Club contemplated at one time or other, to put on record the lives and merits of some memorable individuals of the district, when these had been neglected, or when it might be possible to represent their characters in a more becoming manner by the production of fresh evidence. Hearing that some anecdotes of Dr. Robertson had been committed to writing by the late Mr. Thomas Thomson, of Dunse, I applied to his brother Mr. James Thomson, who kindly furnished the following memorial.

It is very desirable that other worthy and distinguished inhabitants of the Borders should have justice done to them. We are sadly deficient in this duty. The Borderers being a migratory race, many leave their native place in youth, and unless attached to it by some domestic or territorial ties, which may induce them to return and settle at home, become almost expatriated. They require to be sought after, and re-introduced to the scene of their early activities. Dr. Robertson is only one of several, deserving of being favourably replaced in the provincial estimate; and of having the good work which he has accomplished, refreshed in the memories of his fellow-countrymen.

Dr. Abraham Robertson, Savilian Professor of Astronomy in the University of Oxford, was the son of Abraham Robertson, who was a tailor in Dunse, but who ultimately kept a public house; beer being the liquor generally used in those days. He occupied a house at the west side of the Market Place, now the site of the City of Glasgow Bank. He was said to be a very judicious man, and much respected.

Dr. Robertson was born sometime about the middle of the last century; and at the time he was fit to go to school, there were two eminent teachers in the town; Cruikshanks

in the Parish School, a very successful classical teacher, and John Roughead, who kept a private school and was famous for mathematics. Perhaps he attended both these schools, but the latter branch seemed to suit the bent of his genius, and from it he acquired no small reputation among his acquaintances, for the expertness with which he answered the most difficult questions. Being a lad of delicate health, he sought to invigorate his constitution, and at the same time to earn a livelihood, by following the humble calling of a Pedlar in going round the country selling small wares. His father, having become a widower, married a second time; and it is said his stepmother used him harshly, and he was obliged to leave his father's house. While travelling in the county of Northumberland, he was seized with a lingering fever, and was obliged to dispose of the greater part of the contents of his pack to defray the expense of his living and his cure; however, after having recovered, he by some means pushed up to London. Having no friends in the metropolis, and being nearly penniless, in this sad condition he found out a Mr. John Gray, a bookseller, a native of Dunse, who knew his father, and who, being a man of a very benevolent disposition, was induced to take his unfortunate countryman under his protection. With him he stayed for some time, till Mr. Gray procured him a situation with a gentleman who carried on an extensive business, to act in the humble capacity of an errand lad. In this situation he remained a good while. His employer had two sons at school, and their teacher having called upon their father, he made enquiries of him respecting the progress the boys were making at school, for he considered them rather dull and idle at their tasks. The teacher told him that of late, especially in mathematics, their progress was very marked;—indeed he was happy to inform him that he was quite astonished at the correct and properly wrought out answers they brought to very intricate questions, which he frequently gave them to solve. Their father told him he did not see any change of late in the habits of the boys, as they seemed quite as idle and careless as formerly about their tasks, and therefore he doubted the accuracy of this favourable report. However the master maintained that it was quite a fact, and proposed that the boys should be called in, and he would set them a question similar to those they usually got, and which could be done before them, and thus

remove all doubt about the matter. This was agreed to, and the sequel was that the boys completely failed in working the question, and even did not seem to know anything at all about it. The master was very much perplexed at the result, and told them that they had got much more difficult questions than this one, and they had always answered them correctly. The matter seemed very strange; however, on pressing them closely, they admitted that Abraham the errand lad had done all the previous questions for them. The gentlemen were little inclined to give credit to the statement of the boys, that a lad in his humble position should have such an education as to be able to solve such questions; but that they could easily ascertain. So Abraham was called, and admitted that he had assisted the boys with their tasks; stating at the same time that he occupied his leisure hours with that kind of questions. To make sure that this really was the case, a problem of some difficulty was given him, and he was told he might retire and bring it in when finished. Abraham looked at it, and told them that he would do it in a corner of the room in their presence, which he did, very much to their surprise. His employer said it was out of question that a lad of such genius and acquirements should be allowed to continue in his present humble employment; and very generously offered to defray the expense of making his education more complete in those branches in which he was not so proficient as in mathematics; only stipulating that he should continue to assist his sons in their studies. When they were fit to go to the University, he engaged Abraham to go along with them to Oxford, as their private tutor, and by this means he got introduced to the University. He also acted as tutor to others, and from time to time so distinguished himself, that at length he received the appointment of Savilian Professor of Astronomy. He was afterwards appointed a member of the Board of Longitude. Thus from a very humble beginning he acquired a Professorial Chair, which had been filled by not a few eminent men. The duties of his appointment Dr. Robertson continued to discharge for many years, deriving from them a yearly income of £900.

Dr. Robertson is described by his friend, Mr. Simon Gray, who visited him at Oxford in 1819, as "in person rather below the middle stature, and thin, with a countenance which expressed thought and meekness." He was amiable,

gentle, and unassuming, and entirely devoid of pedantry. Though well qualified to write for the public, he appears to have been unambitious of literary fame; and hence his published writings are few. His work on Conic Sections has been described as a highly creditable and useful production.

It was an admirable trait of his character, and one which evinced that, in the prosperous condition to which he had been raised so singularly by Providence, he was still influenced by the Christian precepts which he had been no doubt taught in his youth—that being informed that his step-mother, by whom he had been ill treated, was, after the death of his father, reduced to indigence, he devoted to her relief a sum of money which was the first-fruits of his successful exertions at Oxford. At a later period of his life he exhibited a similar act of benevolence, by investing for behoof of five poor relations in Dunse a handsome sum of money, the benefit of which they enjoyed till their deaths. Dr. Robertson, died at an advanced age, about the end of 1826.

To supplement this information, I have obtained through the friendly interposition of Dr. Acland, Regius Professor of Medicine, Oxford, a copy of the Matriculation Register of Dr. Robertson, from the Rev. Dr. Griffiths, Wadham College; and also a letter addressed to Dr. Acland by the same gentleman, containing some interesting circumstances not known to the previous narrator. I give them entire. The two accounts appear irreconcilable; but when Robertson went to Oxford, he may have acted both as tutor and servant to his master's sons, and even waited at table. Differences of rank may not have been so strictly observed in those patriarchal times.

“From the Register of Matriculation of the University of Oxford.

Termino Michaelis, 1775.

Dec. 7. Aed. Christ. Abraham Robertson, 22. Abraham de Duns, Com. Berwick. Pleb. Fil.

A true extract made April 7th, 1875, by John Griffiths, D.D., Keeper of the Archives.”

“Wadham College, April 7th, 1875.

My Dear Acland,

I send you an extract from the Matriculation Register concerning Dr. Robertson.

From the published Catalogue of Graduates, it appears that he proceeded B.A., June 9th, 1779 ; M.A., Dec. 17th, 1782 ; B.D., June 12th, and D.D., June 18th, 1807.

Dr. Symons attended his lectures, and knew him well.*

He published a treatise relating to the Fifth Book of Euclid, the exact title of which I do not know.

His book upon Conic Sections was (and I believe is) considered the best geometrical treatise on that subject.

He was in good repute as a mathematician, even out of Oxford.

He was brought to Oxford (so it is said) by the well known apothecary, Ireland, was employed by him in the lowest capacity in his shop, and waited at his table when he had company. One day when Cyril Jackson† and other tutors were dining with Ireland, a discussion of a very difficult problem in arithmetic arose, and one of the guests gave an explanation or solution in a very positive way. Robertson, however, interposed with the words "The gentleman is mistaken," then gave the right answer himself, and justified it. The result of this was that Cyril Jackson recommended him to the Dean (Markham), who gave him a Servitorship. Afterwards, by Dean Bagot I suppose, he was appointed Chaplain ; and in time he went off upon a living, from which he was recalled to Oxford in 1797, to be Savilian Professor of Geometry.

In 1810, he succeeded Dr. Hornsby as Savilian Professor of Astronomy, and as Radcliffe Observer ; and was succeeded in both those offices by Rigaud, in 1827.

I believe he died before the end of 1826.

Believe me, always

Yours very faithfully,

JOHN GRIFFITHS."

I cannot ascertain the precise date of Dr. Robertson's decease. In the Obituary of the "Newcastle Magazine" for 1827, p. 28, we have this entry, "January. Died at Oxford, Abraham Robertson, D.D., Savilian Professor of Astronomy, and Radcliffe Observer, aged 75." In the "Annual Register" for 1827, p. 218, is given the appointment of his successor—"March,—Stephen Peter Rigaud, Esq., M.A., to be Savilian Professor of Astronomy, *vice* Dr. Robertson, dec." According to his matriculation, he would be born in 1752-53 ; but according to this statement in 1751-2. The Statistical Account of the Parish of Dunse, (Berwickshire, p. 251), says he was born in 1851, and died in 1826. The reverend

* Rev. Dr. Symons, late Warden of Wadham, still living at a very great age.

† Dr. Cyril Jackson, (1746—1819), afterwards Dean of Christ Church.

statistician adds he was "as much distinguished by his unaffected modesty, and other moral qualities, as by his scientific attainments." He further specifies his charity in settling "annuities of £10 on five poor female cousins in the humble rank of life from which he sprang, and whose infirmities, arising from old age, reduced them to the necessity of receiving a supply from the poors' fund; for which annuities he paid £450."*

A list of Dr. Robertson's writings up to 1824, is here annexed from Watt's "*Bibliotheca Britannica*." It does not contain the work on Euclid, which may have been of subsequent issue.

Sectionum Conicarum, libri septem; accedit, Tractatus de Sectionibus Conicis, et de Scriptoribus qui earum doctrinam tradiderunt. Oxon, 1793, 4to., 21s. A Geometrical Treatise of Conic Sections. Oxford, 1802. 8vo. A Reply to a Critical and Monthly Reviewer, in which is inserted Euler's Demonstration of the Binomial Theorem. Oxford, 1808, 8vo. The Binomial Theorem demonstrated by the Principles of Multiplication. Phil. Trans., 1795, Abr. xvii., 573. A New Demonstration of the Binomial Theorem, when the exponent is a positive or negative Fraction. Ib. 1806, 305. On the Recession of the Equinoxes. Ib. 1807, 57. Direct and expeditious Methods of calculating the eccentric from the mean anomaly of a Planet. Ib. 1816, 127. Demonstrations of the late Dr. Maskelyne's Formulæ for finding the longitude and latitude of a celestial object, from its right ascension and declination, and for finding its right ascension and declination from its longitude and latitude, the obliquity of the ecliptic being given in both cases. Ib. 138.

JAMES HARDY.

* New Statistical Account of Berwickshire, pp. 251, 254.

Obituary Notice of Sir William Jardine, Bart., of Applegirth.

Sir William Jardine, Bart., the eminent naturalist and ornithologist, was born at Edinburgh, 1800. He was educated at home to the age of fifteen, and then at York where, as he often related in after life, he was "sent to learn English." From York he went to Edinburgh, where he studied Medicine and Anatomy; and his scientific training at the University of Edinburgh, laid the foundation of that love for Natural History, which so distinguished him in after life. Here he attended the lectures and geological excursions of Professor Jameson, and the botanical lectures of Mr. James Scott; while his studies in comparative anatomy, were carried on under Professor John Lizars, who afterwards became his brother-in-law, as he afterwards married his sister in 1820. He then pursued his anatomical studies in Paris; but his father, Sir Alexander, dying in 1821, he returned to Scotland to fulfil the important duties of a large landed proprietor.

At all times he was a keen sportsman, both with rod and gun, and when a young man was a hard rider to hounds. More than once he has been known to dash into the flooded Annan on his favourite horse, when fox and hounds had crossed the water, which to others was dangerous in the extreme, as the stream is very rapid when in flood.

In 1825, he published jointly with Mr. P. J. Selby of Twizel, "Illustrations of Ornithology;" the 4th volume of which was not completed until 1843.

In 1831, was founded the Berwickshire Naturalists' Club, the first established of the many Field Clubs now in existence throughout Great Britain; Sir William Jardine was elected a member in 1832, and was President in 1836.

In 1833, he commenced the editorship of "The Naturalists' Library," in 40 vols.; which occupied him for 10 years, many of the volumes being written by himself. In 1831, he assisted in conducting the third volume of the "Edinburgh Journal of Natural and Geographical Science." He was also in 1837-8, joint editor with Dr. Johnston of Berwick, and P. J. Selby, of the "Magazine of Zoology and Botany;" which after the publication of the 2nd volume merged into the "Annals of Natural History." He was also joint editor with Dr. Balfour and others, of the third series of the

“Edinburgh New Philosophical Journal.” In 1834, he went on a tour through Sutherlandshire, in those days, as far as Natural Science went, an unexplored country. He was accompanied by his youngest brother, John Jardine, Mr. Selby, and Mr. James Wilson; and the naturalists were provided with every appliance for the collection of plants, birds, and fishes. Their conveyance was a boat upon wheels, drawn by two Highland ponies; and this served them well for fishing the lochs, and for visiting the haunts of wild fowl and other rare birds, which sought the unfrequented moors and waters of Sutherland. The boat often served as a sleeping place, and many nights were passed under-neath its shelter when turned over as a covering from the weather. It was during this tour that the great lake trout, *Salmo ferox*, was discovered and described; while the study of Ichthyology was henceforwards added to the other studies of this accurate observer of Nature, and led, eventually, to the publication of his beautiful work on “British Salmonidæ.” Previous to the publication of this work, Sir William had undertaken numerous experiments on the rearing of young salmon and trout, in a small pond prepared for the purpose; and these were from time to time turned into the Annan, marked by small rings, or other devices, which led to several being recognised, and their weight registered, when taken months afterwards. He often visited, and gave the benefit of his advice, in the establishment of the Stormontfield Ponds, which were under the care of Sir John Richardson, Bart., of Pitfour. Indeed, his knowledge of Ichthyology led to his appointment in 1860, as the principal Commissioner appointed to investigate the Salmon Fisheries of Great Britain, and the causes of their decay.

Another study, by which Sir W. Jardine became known to the scientific world, was that of Ichnology, or the study of the footprints of different animals, when left imprinted upon the shores of seas, lakes, or rivers. He was induced to take up these investigations, from the fact that numerous footsteps of extinct reptilian animals were found on the Jardine Hall property, at the celebrated Corncockle Muir Quarry, in the Permian sandstones of Annandale. This led to the publication in 1851, of the valuable Monograph, known as the “Ichnology of Annandale.”

In 1844, the Ray Society was established. It was proposed almost simultaneously by Dr. Johnston and Mr. Hugh

E. Strickland, the son-in-law of Sir William. In answer to a letter on this subject from Mr. Strickland, in Dec., 1843, he wrote,—“In regard to the Ray Club, it is one of those things which if established with sufficient funds to publish 2 or 4 vols. annually, would do much good; and it is one of those things which may hang on for ten years by talking; meanwhile, if you approve of the general plan, get as many subscribers as possible.” Details of the establishment of the Ray Society are given in the “Memoirs of H. E. Strickland,” p. cxxiii, to p. cxxvii.

Ornithology was nevertheless the study which Sir William followed with untiring perseverance; and his ornithological museum at Jardine Hall, was probably unrivalled by any private collection in Great Britain. Prince Bonaparte, Jerdon, Blyth, Hodgson, Gosse, Kirk, Gould, contributed from time to time to the collection of birds, which were accumulated from every quarter of the globe, and of which, at the time of his death, he had all but completed a detailed catalogue; marking each variety of plumage, age, and sex, with the localities where each bird was found, and the person from whom the specimen was obtained. The stuffed British birds, in the museum, were chiefly shot and preserved by himself. Some of these are now extremely rare, and difficult to obtain.

In 1848, he commenced the “Contributions to Ornithology,” which were continued until 1853, when the work was given up, chiefly owing to the shock caused by the death of his distinguished son-in-law, Hugh E. Strickland. In 1855, he published the 1st vol. of “Ornithological Synonyms; and in 1858, the “Memoirs of Hugh E. Strickland; which, with the exception of some contributions to the “New Edinburgh Philosophical Journal,” were the last emanations of his pen.

He was president, from its foundation, of the “Galloway Natural History and Antiquarian Society,” and a contributor to the papers of its “Transactions.” Indeed, he was the Laird of Spedlins Castle; that old border baronial tower of the Jardines, by “the Annan water wan;” of which Grose tells the strange story of the ghost of a starved man, by which it was haunted. There are few Ornithologists of modern repute, who do not owe much to days passed at Jardine Hall, and to lessons in ornithological research, which they learned at the feet of the veteran Naturalist who

has passed away ; and who will ever be remembered with respect by those who had the privilege of his acquaintance, and with sincere affection by those who loved him as a friend.

Sir William Jardine was—

Doctor of Laws and Learning ; Fellow Royal Society ; Do. Royal Society of Edinburgh ; Do. Linnæan Society ; Do. Physical Society of Edinburgh ; Do. Meteorological Society of Scotland ; Do. Anthropological Society of London ; Do. Microscopical Society of Edinburgh ; Do. Botanical Society of Edinburgh ; Do. American Philosophical Society of Philadelphia ; Do. Ornithological Society of Germany ; Member of the Wernerian Society ; Do. Berwickshire Naturalists' Club ; Hon. Member of the Tyneside Naturalists' Club ; Do. Cotswold Club ; Do. Malvern Club ; Do. Woolhope Club ; &c., &c.,

SIR WILLIAM JARDINE.

Sir William Jardine died at Sandowne, Isle of Wight, on the 21st November, 1874. He was the sixth baronet of Applegirth. The owner of a fair estate in Dumfriesshire, where he generally resided, he took a leading part in the public business of the county ; and he was especially active during the prevalence of the cattle plague there. On one occasion he came forward as conservative candidate for the representation of that county in Parliament, but retired before the day of election. He was appointed a Deputy Lieutenant of Dumfriesshire in 1841.

"In social life," we are told, "Sir William Jardine was most genial ; all his weight of learning sat lightly upon him, and the smile which lighted up his face was as sweet as it was frequent."

He may almost be said to have been an original member of our Club, being elected at the first anniversary, Sept. 19th, 1832. He then resided at Holmes on the Tweed, which stands a few miles farther down the river than Melrose. He was the fifth President, his "Address" being delivered at Yetholm, Sept. 21st, 1836. He commenced for the Club a series of papers on the Salmonidæ, but only finished two, viz.—

1. Notice of the Herling of the Solway being found in the Tweed, with some observations on its habits and distribution.—*Hist. Ber. Nat. Club*, vol. i., p. 50.

2. Notice of the Parr. *Ibid*, p. 82.

A list of his numerous writings, up to 1850, may be found in Agassiz and Strickland's "*Bibliographia Zoologiæ*," vol. iii., pp. 317—319; published by the Ray Society.

As a befitting sequel to this Memoir, the Club is indebted to Mrs. Barwell Carter for the communication of a journal, written by her father, of a visit paid to Jardine Hall, in 1844; recording Dr. Johnston's impressions of Dumfriesshire and Galloway, and his opinion of Sir William, derived from personal intercourse. It forms a pleasing episode in the lives of both distinguished Naturalists.

J. H.

DR. JOHNSTON'S *Journal of a short visit to Jardine Hall, in 1844.*

AND now we found ourselves in the avenue leading to Jardine Hall, where a most friendly and cordial reception awaited us, and we were soon at comfort and ease with the family.

Tuesday, 10th September. I spent this day in a stroll through the gardens and grounds of Jardine Hall, and through part of the estate. The House, built of a dark red sandstone, reminded me of Twizel House, which it resembles in outward appearance, but the interior arrangements are entirely different. There were many things to interest us in the gardens, which are well kept; and the grounds contain many fine trees, especially beech and ash, and a very large hawthorn stands near the house, which Mr. Selby has engraved in his *History of British Forest Trees*. Sir William Jardine pointed out to me some beautiful and thriving specimens of the Firs that have been introduced of late years into this country, and which grow here very fast and freely. In my stroll adown the Annan—a sweet stream—I noticed some small shoals of Dace, called here "Skellies," a fish I had not seen previously; and here too I gathered for the first time, *Jasione montana*, and was much taken with the beauty of its dark blue flowers. It grows in profusion in all this part of Dumfriesshire, some fields being as full of it nearly, as they are of the daisy with us. Several species of *polygonums*—*Hydropiper*, *lapathifolium*, and *Persicaria*—abounded to a most noisome degree in many of the fields; which, indeed, in general seemed almost choked with annual weeds.

The contrast between the land here, and in Berwickshire, is greatly in favour of the latter. The only plant of rarity I gathered was *Utricularia intermedia*. It grew in abundance in a ditch cut through a swampy field, which not many years ago was a pond of resort for myriads of wild ducks. It is now firm enough to bear a coarse sort of grass, which is annually mown and makes good meadow hay; and this conversion from water to solid land, is solely the result of nature, and of the annual decay of the aquatic plants that grew in the lake—the pond—the morass—the bog—and which will ere long be the meadow. About Jardine Hall, *Lepidium Smithii* grows plentifully, and I observed it to be common in other parts of Dumfriesshire and Galloway. *Polytrichum urnigerum* was most profuse, on banks by the road sides, in our walk this day, and was really an interesting object.

Wednesday, Sept. 11th. Soon after breakfast Sir William's carriage was at the door to take a willing party to Lochmaben and its Castle. The drive was pretty enough, but chiefly interesting from its novelty. It took us through the royal burgh of Lochmaben, an insignificant town with some antiquarian interest; and a pillar of granite, erected by his nephews to Mr. Jardine, who went from this, his native town, to China, where he prospered and grew rich, and succeeded in making some relatives grateful by his death. One of them, Mr. Johnstone, has his residence close at hand, where he has built a handsome range of stables, and prides himself on being the owner of Charles the 12th. This gentleman who now enacts the squire and the sportsman, had been educated for the profession of a surgeon, and was for some time an assistant in the navy. He dined with us at Jardine Hall yesterday, and was pleasing both in his appearance and manners. Lochmaben is a large sheet of water, for nothing so remarkable, as for containing an abundance of the Vendace; and for being the locality of Bruce's Castle, which stands on a peninsula that juts out on one side of the lake. This Castle has been a place of great strength and noble architecture; to judge from its crumbling remains, which are now surrounded by many noble ash trees. I brought away with me a memorial or two from the walls of a place which is said to have been the favourite residence of Robert the Bruce.—(Chambers' "Picture of Scotland," p. 97.) Chambers here confounds Lochmaben Castle with

Bruce's Castle; the latter is the fortress erected by Bruce, the former the old castle which supplied the materials. We botanized an hour or so by the lake, and here I gathered for the first time, in a growing state, *Typha angustifolia*, *Bidens tripartita*, *et cernua*, *Sison verticillatum*. We also gathered here *Cicuta virosa*, *Radiola millegrana*, and *Scutellaria galericulata*. We walked afterwards to Lochmaben Castle, which is nigh at hand; and the slight remains of which are covered up with a green sward, on which sheep were quietly grazing. We must come to this at last, as well as baronial castles. The view from the Castle's mound was extensive and fine, but the details of it have already faded from my memory, probably because it was too extensive and indistinct. All I can remember is the lake at its base, and above, the Burgh of Lochmaben, a lake not half the size of the former, but plenished like it with the celebrated Vendace. We were now again joined by the party in the carriage, and drove some miles on a road that carried us homewards; when Sir William, Mr. Macdonald of Rammerscales, and myself, alighted for a walk across some extensive muirs that form part of Sir William's property. It was in this walk that I gathered *Ornithopus perpusillus* for the first time; and my pleasure was increased manifold, when shortly afterwards I saw growing in its sphagnous bog, the *Andromeda polifolia*: less heightened certainly by the intrinsic beauty and delicacy of its drooping blossoms, fair though these be, than by the memory of the poetical and beautiful description Linnæus has given of this daughter of Cepheus, and which now came strong upon me. Oh! when shall we have a flora of Britain embued with the spirit—the love of that master mind! A flora, *not* on the model of the “Flora Lapponica,” but, conceived in its spirit, and executed with its taste and talent, would spread the study of botany far and wide amongst us, and would in itself be a society for the diffusion of entertaining knowledge. And so musing we left our fair flower, and hastened onwards to inspect the Spedlings, the ancient fasthold of the Jardines of Applegirth. This is a very interesting Tower, and entire so far as the outward walls are concerned; for the roof has fallen in, and many of the interior walls are now decayed. The dining room has been a fine room, with a noble fireplace, ornamented with a large marble chimney piece; the room is arched like an oven, and in the recesses through which the light

comes, are stone seats for guests. There has been no lack of accommodation for small and retired parties to consult together, even in the common hall. We were shown the entrance to the dungeon, and had again the story of the ghost and the bible. Ascending to the top I plucked a few leaves of ivy, that was doing its best to ornament this deserted residence; and deeply did I sympathise with the owner of it, that it should have been left thus vacant, and exposed to destruction; when it might have been repaired and restored and made habitable, for the sum that was expended in building the modern house, that stands on an inferior site on the opposite side of the Annan. There must have been some great defect of heart—some sad lack of love of ancestral deeds, a no-love of fatherland; that he who first left this place of family pride, should have seen no virtue in its restoration and preservation. I deem him to have wronged the present talented baronet and his descendants for ever. And now we waded the Annan, and so home to dinner, all mourning over the Spedlings. In the evening, we were shown the famous ghost-laying bible, and a very beautiful volume it is, kept in a box formed of a rafter of the Tower. It is in its original binding repaired; and is printed in a beautiful old English letter. Looked over also some proofs of a volume preparing for the Ray Society, and am not pleased with the same. Mr. Macdonald, who translates a considerable portion of the volume, is a country gentleman of property, who lives about six miles from Jardine Hall, in a house famous for the difficulty of access to it; so that visitors often leave their carriages at the base of the hill and ascend on foot. It is not less dangerous to descend this avenue, as witnesses this true story. Mr. Macdonald is the nephew of the late proprietor, and driving his uncle down the road in question, the gig was overturned, the uncle was killed; and Mr. Macdonald found himself the Laird of Rammerscales several years anterior to the laws and ordinations of Nature!

Thursday, Sept. 12th. A long drive to-day. Starting immediately after breakfast, we took the road to Dumfries; which for some miles was very uninteresting, and would have been more so, had I not had Sir William to tell me the names and history of the more prominent objects and hills in our view. These I have now almost forgotten. The first and better half of our road was very much of a contin-

ued ascent, until we reached a poor village, with a name so foreign to my ears, that I could not retain it in my memory. There is a considerable seminary, or "Classical and Commercial Academy" in it, but we saw none of the scholars or boarders. From the hill above this village, there opened upon us a fine view, which reminded me of Milfield Plain; but the latter had a decided superiority in all respects. The plain below was a large basin encircled with hills, traversed by the little river Lochar on the nearest side, and occupied by the town of Dumfries to the south-west. Lochar Moss lies in the centre, an enormous peat bog of about 10 miles in length, and 3 in breadth; and our road cuts it into two unequal halves. This road is remarkable for its origin: a stranger, a great number of years ago, sold some goods to certain merchants at Dumfries on credit; he disappeared, and neither he nor his heirs ever claimed the money; the merchants in expectation of the demand, very honestly put out the sum to interest; and after a lapse of more than 40 years, the town of Dumfries obtained a gift of it, and applied the same towards making this useful road. We presume the good folks of Dumfries had concluded that the stranger had laired himself in this bog, and sunk in one of its pits, which served him for an untombstoned grave, a thing they of Dumfries seem to have in fear. Lochar Moss supplies the good people of Dumfries with an abundance of peat, which is the fuel with the commonality all over this district, and there were workers of it scattered throughout the moss. There is a certain interest about these men, who appeared to be of the lowest class in general. No noise attends their monotonous labour, the spade cuts without grating, the clod is thrown aside without evoking a sound, there is no converse, each toils by himself, without giving or receiving another's orders or directions; silence reigns around, and imparts to the labour a peculiar, but rather disagreeable, interest; for this outward solemnity of nature tells not favourably on the minds of men of the low degree of cultivation these have. Solitude is not for them. Dumfries is a very fine town. We walked through its broad, clean, busy street with pleasure, admired its shops, its bridges, and its magnificent asylum for the insane, at a little distance on a wooded bank above the Nith; drove through the pretty suburb of Maxwelltown, and following the course of the Nith, took a seaward direction. The road was greatly

improved in interest ; the land and the style of farming good. We were not long in arriving at New Abbey, where we rested an hour, in order to examine its beautiful remains. Within its walls there lie the bodies of many Maxwells, the prevalent families in this neighbourhood ; and as the head of them is a Roman Catholic, there appear to be many of that religion hereabouts. Near the Abbey there is a Chapel and manse for the priest and his charge. Leaving the Abbey, we had a pleasant walk through the churchyard ; around the old garden, with its fern-clad wall ; and up the road a little, where it is lined with a double row of limes, that meet overhead and form an avenue, where monks may have mused, or conned their sermons, in days of yore. There is a monument in the Abbey, erected to the memory of two young gentlemen—brothers,—who were drowned together hard by ; and I now feel sorry that I did not take a copy of the inscription on their tombstone. I gathered some memorials of the place from its damp walls, which the ivy strives in vain to decorate. It is trite to make contrasts, for, in this world everything must suffer change and decay ; nor doth it seem of use to revive a picture of the Celebration of High Mass, with all the gorgeous pageantry, in an Abbey that now shelters a herd of cows from the inclemency of the weather. What may be the thoughts of the spirit of the Lady Foundress, I know not ! How vain it is to attempt to immortalize our affections, which are, and must be, part of our perishable organization ! The Abbey was founded by Devorgilla, daughter of Alan, Lord of Galloway, and wife of John Baliol, Lord of Castle Bernard, who died and was buried here ; his lady embalmed his heart and placed it in a case of ivory bound with silver, near the high altar ; on which account the Abbey is often called Sweet Heart, and Suavi-cordium.* Again we are on the road, and attention is kept awake by the novelty of every scene and object we pass. But the first place we note is the neat and pretty hamlet of Kirkbean ; whose ornate character tells as plainly

* ["She foundit intil Galoway
Of Cistertians order an Abby,
Dulce Cor she gart thame all
That is *Sweet Heart* the Abby call,
But now the men of Galloway
Call that Steid *New-Abby*." WYNTOWN.

It is named by Lesly "*Monasterium novum, seu Sauvi-cordium.*"—*De Origine, &c., Scotorum*, p. 9.]

as a guide could, that a rich proprietor's residence is at hand ; and a triumphal arch erected across the road proclaimed to us that this proprietor, Mr. Oswald, M.P., for Ayrshire, had brought to the favourite residence his lady, the widow of the late Sir James Johnstone of Westerhall, to whom he had been married about three weeks ago. And next we admire a small and humble cottage, covered in front with the vine and fig tree, which appeared to be in a flourishing condition ; and I observe that all hereabouts, and afterwards on our route, the brambles abound to a degree greatly beyond what they do on the Eastern Borders, and are loaded with fruit. The species too are not the same as they are with us. The prospect improves as we drive on, and we often stop to admire it ; the Solway and its broad sands, the Westmoreland and Cumberland hills, the opposite coast with its indistinctly seen villages, the hills and woods of Galloway. Many interesting localities were pointed out by Sir William which served the purpose of raising and satisfying a curiosity that died away on the spot. We nighed the shore of the Solway ; the road sides rough with brambles, and rich in many other plants that interest an eastern botanist. *Sedum telephium*, almost unknown on the eastern side of the island, was not uncommon here, truly wild and luxuriant. But it was as interesting to notice the different habit which some plants, common to the two districts, here assumed ; in general they were more luxuriant. The banks too, where steep and elevated, were clothed to the very base with a very rash vegetation of numerous plants, and with trees and shrubs. A rock called "Lot's Wife," at the foot of a rocky deep ravine, was a tempting object, but time could not be spared for a descent upon it ; it was rich in many a flower, and at an earlier season must have been gay and joyful with their various blossoms. We halt at Douglas Hall, a hamlet of poor cottages, where it was difficult to find accommodation for the horses. And then we had a nice stroll, first over some links, where I gathered *Thalictrum flavum*, which is a rare plant in Scotland, and *Erythraea linarifolia*. *Ruppia maritima* was plentiful in some pools of brackish water. We then entered on the Solway sands, which spread far and wide, around and before ; my head was full of Sir Walter Scott and his vivid descriptions of them. This extent of sands has a grandeur and solemn influence, which is greater than one could imagine mere extent of a flat surface could

give ; but you *feel* the scene, and that feeling would be even oppressive—fearful perhaps—were one alone to traverse their weary and watery level. After walking a short way over this flat surface, we reached a coast bounded by a rocky precipitous bank of great height and rugged beauty. The rocks were hard and sharp as flint, of a reddish colour, broken into acute angles and masses, and caverned with many caves that lead sometimes far inwards. Often an enormous mass of rock had fallen down and concealed the front of these dark recesses ; and more than one might have been the type of the cave that sheltered Dick Hatterig and his ruffian smugglers. As this fine and bold piece of coast was wooded too to the very ledge, there were other places whence Kennedy might have been precipitated ;—indeed the scenery seemed to be exact to that described by Sir Walter Scott, in his “Guy Mannering.” It is of these very rocks that Chambers says :—“It has been supposed, with no inconsiderable degree of probability, that they furnished materials for the scenery of Ellangowan.”—I enjoyed this scenery greatly, and it was rich also in a botanical view. First in interest, there was the Samphire, growing in places whence to have gathered it would be indeed a “dreadful trade.”—“Half-way down hangs one that gathers Samphire,—dreadful trade!” Sir William told me, that within his memory a man living at Douglas Hall, was wont thus annually to collect Samphire from these rocks. I succeeded in reaching one tuft, which supplied me with specimens as memorials of the Colvend rocks ; which, I ween, are somewhat grander than those of Dover, and not less immortal in man's memory were they ; in fact, the objects the great Northern Novelist had in his eye, when he drew the coast scenery of “Guy Mannering.” The *Pyrethrum maritimum* grew here abundantly, also in inaccessible spots ; but it was truly ornamental, as its large white flowers showed bravely with the dark rock behind. The rock was studded everywhere with these and other sweet flowers. The *Arenaria marina*, *Silene maritima*, *Statice armeria*, *Sedum telephium*, *Cochlearia officinalis*, *Asplenium marinum*, commingled themselves on the rugged front, with wiry grasses, the Ivy, the Holly, the Whin, and several fine arching briars and roses ; while on more exposed abutments, several yellow and green lichens found space to spread their circular patches. Sir William pointed out one or two specimens of the Yew, which would seem to be

indigenous here. Left this scene with reluctance, and ascending the bank, we returned to Douglas Hall by a high road, that afforded extensive views of the Solway and the coast. I know not in what direction we were now driven; but the road was tortuous and interesting, and fringed on each side with numberless briars, the species different from those of Berwickshire, and more productive of fruit. The hills around us were granite, and the country was very unequal and rocky; so that Galloway must be as ticklish a place as Galway, for the gentlemen who love to follow the hounds fair; indeed we were told that fox hunting was here an unknown sport, and the proprietors give 10s 6d. for every fox that any countryman may destroy, by fair means or foul. There were many valleys stretching up and between these rough hills, that, as a botanist, I yearned to explore; but, it was onwards we must go, contented with the glances of fields which it seemed very certain I would never again re-visit. Oats and barley appeared to be the only corns cultivated, and the fields were redolent of annual weeds. Peat mosses were numerous, and in each of them a solitary individual worked away in cheerless silence. After a long stage in which we had passed very few houses, and not even an onstead, we came to Dalbeattie, a nice looking village that looks as if it had been set down in this thinly peopled district by some mistake, and one wonders what the inhabitants of it can find to do. Yet it has every symptom of comfort about it, and the stone houses are all covered with blue slates, and white washed. There is a good Inn in the village, and a mail coach passes daily through it. A few minutes drive now brought us to Munches, and to the end of our day's travels.

Friday, Sept. 13th. Munches is the residence of Mr. Maxwell, a young gentleman married only a few months since, to the eldest daughter of Sir William Jardine. The house has nothing notable in it, but the grounds are beautiful, and in the neat flower garden we found a great display of fine flowers, groups of which were likewise tastefully planted about the house. I enjoyed a morning stroll in this pretty garden, and over the grounds very much; and the pleasure was heightened by the company of Mr. Maxwell, who hourly improved upon us. He is really a very excellent and amiable person, very fond of farming, and anxious to adopt modern improvements, which from a deficiency of chemical

knowledge, he has a difficulty of explaining or comprehending. I never saw such capital specimens of the Scotch Fir as grow here, and the Beeches too are superlative; all Mr. Maxwell's woods were indeed thriving. The hills which bound the grounds are clothed with young wood; and as they are granitic, very pretty, and much broken up into scaurs and ravines, they presented a very tempting field to a botanist, which we must leave others to investigate. From the hills about us large quantities of granite are quarried and exported to Liverpool and other places. We were told that some had been sent even to America. Yesterday we had to dinner, and this morning to breakfast, a dish of Spirlings or Smelts; the first occasion on which I had eaten this small but delicate fish. It is taken in abundance in the Urr, a small river, or rather muddy canal, which bounds the grounds of Munches, and up which the tide runs with considerable velocity. The water is turbid and *drumlie* with a fine mud, that makes a smooth bottom to the water. On its banks the *Scirpus maritimus* grows in profusion; but to remind me of Munches, I preferred gathering a specimen of the common Polypody from Craig-Turrock, a picturesque rocky mound in front of the house, and very prettily ornamented with various shrubs and flowers. About mid-day left Munches and again passed through Dalbeattie; when we diverged into a new road, which took us straight to Dumfries. The drive was at first not very interesting, and we had few brambles on the road side. After several miles we entered the pass of the Long-wood; a pass between the bills, which gives one a lively idea of the difficulties an army must encounter, in forcing a passage through such a road, defended by troops on the banks on each side, and on the turns in front and behind. The passage is fine and interesting, and the descent very steep on the Dumfries side. Well, we are once more in the beautiful town of Dumfries, and we take a stroll down its quay; and after satisfying our admiration of the views up and down the Nith, we visited the churchyard, remarkable for the great number of its expensive tombstones, engraved with epitaphs of all sorts and sizes. Some of the stones possess considerable interest; such as those which commemorate the deaths of the Scotch Martyrs, and the benefits which the town had derived from the services of a Provost of the time of King James the 6th. But the principal object of interest in the churchyard is the

mausoleum of Burns, where his mortal remains lie; and generations yet unborn will visit the spot, led thither by the same feelings that led us,—admiration and gratitude, and love, and pride, and mournful sympathy. I resolve here to re-peruse his everlasting works, and I must some day fulfil my vow. Our curiosity satisfied, we next went to see the house where he lived the latter years of his life, and in which he died. I like the remarks of Chambers on visiting this mausoleum (*"Picture of Scotland,"* p. 104); and am well pleased to have seen it. Guide books now a days make a traveller's Journal very short; and so without mention of what other things we saw there, we leave the town and return to Jardine Hall by the same road which we travelled yesterday. And our long journey made us enjoy with zest our dinner, to which we had the Vendace; and an epicure may esteem the man fortunate, who could thus have the good fortune to eat, two days in succession, fishes he had not tasted before. The Vendace is a very delicate fish.*

Saturday, Sept. 14th. The rain fell incessantly, and so heavily, that we were confined to the house; and found not an hour of the day in which it was possible to have a stroll. So we occupied ourselves in examining the library; which contains some fine and interesting works. Perhaps none of them interested me so much, as some original letters of Wilson, the American ornithologist, and copies of the only two engravings he ever executed. Sir William Jardine is a sincere and hearty admirer of this wonderful man and naturalist, and there is something in common between them. Sir William is a man of talent, of quick and original observation, and of considerable acquirements; but he wants decision, and has had a defective education. Still, there are few naturalists who are equal to him in mental character, and who study their science with the same high views; which his limited command of language does not allow him to do justice to, or develop in a manner that takes with the public. I like my friend much, and have every reason to be pleased with my visit to him. After the Library we examined the Museum, and his various collections. Perhaps the things that most took my fancy, were two glass beads of the size of marbles, which the common people everywhere call Adder's Eggs; and which antiquarians seem puzzled to say what

* Sir William Jardine's account of this fish may be found, along with a figure, in the *Edinburgh Journal of Nat. and Geog. Science*, vol. iii., pp 1-5.

they were. That they are of Roman manufacture is undoubted; but for what purpose were they made? The specimens in Sir William's cabinet were found in a peat moss on his estate; and in the same moss there were found a small brass kettle and pot, which are also in his possession. Pennant delineates a pot exactly similar to the one we were examining. Upon the whole, this was an interesting day; and a pleasing variety to those we had of wandering "here awa, there awa."

Sunday, Sept. 15th. The rain continued to fall without interruption; and the Annan had risen higher than it had done for several years back. Lessening in severity however, we ventured to the Parish Church at Applegirth; which is distant rather more than two miles from Sir William's residence. The Reverend Dr. Dunbar is a clergyman much above the average of parish ministers in appearance, manners, and talents; and his sermon was composed with care, and delivered with chaste propriety. It was chiefly doctrinal, after the fashion of Presbyterians; and this seemed to me an error, considering that the class to whom it was preached were principally agricultural labourers. From the Manse garden we had an extensive view of the Annan, which had now risen above its banks, and overflowed all the adjacent haughs. Corn fields were flooded, and here and there people were busy removing the crop from amongst the water; while in other places carts were standing axle-tree deep in the water, arrested while the work of removal had been going on. The scene reminded me strongly of a similar one described by Thomson in his "Autumn." —

"And still

"The deluge deepens; till the fields around

"Lie sunk and flatted in the sordid wave;

"Sudden the ditches swell; the meadows swim.

"Red from the hills, innumerable streams

"Tumultuous roar; and high above its banks

"The river lift, before whose rushing tide,

"Herds, flocks, and harvests, cottages and swains

"Roll mingled down."

The poet has very probably drawn his picture from scenes which he must have seen when a youth in his native district, exaggerating the details a little after his own way. In the churchyard at Applegirth, there grows a very fine and very large ash tree; from which in the good old times, the Branks

were suspended, ready to be used to restore the quietness of the household ; when the good wife's tongue had wagged too freely, and railed too loudly, in the judgment of the Kirk Session. Now wives speak in a softer key, or Kirk Sessions are more tolerant ; for the Branks have, from long disuse, become barked over and buried in the tree.

The storm having ceased, and the mist cleared away, we left Jardine Hall at 5 o'clock in the afternoon ; not without a feeling of regret ; and very grateful for the kind attentions we had received from Sir William and Lady Jardine, and their dear family.

Notices of the Jardines of Applegirth. Communicated
by CRAUFURD TAIT RAMAGE, LL.D.

[The following article was forwarded by Dr. C. T. Ramage, of Wallace Hall, author of an interesting topographical work, entitled "Drumlanrig and the Douglasses." As it contains information not elsewhere procurable, regarding an old Border family, some of the members of the Club may be pleased with this contribution. It does not descend to modern times, but those who wish to trace its applicability to the past and present owners of Applegirth, may consult any work on the Baronetage.]

CHARTERS AND RETOURS.

- 21st April, 1505. Charter to Alexander Jardine, nephew and apparent heir of John Jardine of Applegarth, for his faithful services, the £10 of Applegarth, now called Muirhouse ; the 3 Merkland in the Park ; the 4 Merkland, now called Godfraby ; the 4 Merkland in North-holm, and the £8 1s. 4d. land of Lomanby, which belonged to the said John Jardine, and was assigned to the king (James IV.), for 508 merks due to him.
- 4th Dec., 1544. Charter of the lands of Hillhouse, Caldchapell, &c., to John Jardine of Applegarth, and Margaret Douglas, his spouse, daughter to James Douglas of Drumlanrig.

- 17th Feb., 1558. Retour of Alexander Jardine of Applegarth, as heir of Sir Alexander, his great grandfather, in the £16 land of Drumnowan, Moncraigis and Inglishtoun, in the parish of Kirkanders, Kirkcudbrightshire.
1558. Charter of the lands of Hillhouse, Hartsyde, Nether-Caldchapel, &c., in Lanarkshire, to John Jardine of Applegarth.
1559. Charter of Alexander Jardine, heir apparent of Applegarth, in the barony of Hartside, alias Wundall, Lanarkshire.
- 27th Feb., 1572. Alexander Jardine of Applegarth, retoured to his great-grandfather in the £16 land of Drumnowan, &c.
1576. Charter confirmed to John Jardine, son of the late John Jardine of Applegarth, of the lands of Garrantoun, Kirkeudb.
- 26th April, 1608. Sir Alexander Jardine of Applegarth, retoured to his great-great-grandfather in the lands and barony of Kirkanders.
- 9th March, 1613. Retour of John Jardine, son and heir of Sir Alexander Jardine, in the lands of Applegarth, and Sibbaldie, &c., and the barony of Hartside or Wandell, Lanarkshire, and lands in the parish of Kirkanders, Kirkeudb.
- 9th May, 1643. Retour of Alexander Jardine, as son and heir of John Jardine of Applegarth, in the lands of Applegarth and Sibbaldie, &c.
- 19th July, 1669. Charter of Alexander Jardine, of the lands of Applegarth.
- 25th May, 1672. Diploma of Baronet to Alexander Jardine.
- 1st July, 1672. Charter to Sir Alexander Jardine, Bart., of the barony of Applegarth.
- 22nd May, 1691. Retour of Sir Alexander Jardine, as son and heir of Sir Alex. Jardine of Applegarth, in the barony of Applegarth, with the church.
- 8th August, 1704. Retour of Sir John Jardine, Bart., as heir to his brother, Sir Alex. Jardine of Applegarth, Bart.
- 26th July, 1716. Charter of resignation of Sir John Jardine of Applegarth, Bart., brother-german of the late Sir Alexander, in the lands of Eastwood.
- 22nd Jan., 1744. Charter of adjudication to Sir Alexander Jardine of Applegarth, Bart., in the barony of Applegarth.

NOTES.

"Lady Margaret Jardine, widow of Sir Alexander Jardine of Applegarth, and daughter of Douglas of Drumlanrig, married 2ndly, Sir David Thoris, Advocate of Innerkeithing; and had Sasines from 1671 to 1676, on the lands of Applegarth, &c., for an annual rent of 2500 merks, during her lifetime. She was wont, for a halfpenny, to carry people over on her shoulders, across the Annan, near the Castle of Spedling; and used to sit there for this purpose, whenever there was a prospect of passengers. Her first husband died previous to 1695, and Alexander, his son, succeeded.

Alexander, the father of Sir Alexander, married Janet Johnstone, widow of John Carruthers of Rammerskailles, before 1651; and daughter of John Johnstone of Wamphray, by a daughter of Montgomerie of Cockilbie.

Sir John Jardine, brother to Sir Alexander, and son-in-law of the said Margaret Douglas, married first the daughter of Lockhart of Carstairs, and secondly, the daughter of Commissary Charteris of Dumfries. By his first wife he had Sir Alexander; and by his second wife, Sir William." (Charles Kirkpatrick Sharpe's Notes).

A Charter of Donation in the Dryburgh Chartulary, by Robert de Maxwell, knight, Lord of Caerlaverock, to the Monastery of Dryburgh, of that land in West Pencaitland, which John Mantetlet, (Maitland) Lord of Thyrillstane, held of him, is signed along with others, by "Umfrido Jardyng." This charter is without date, but thought to be about 1400. The above Sir R. Maxwell succeeded his father 1373, and died 1409. It was he who rebuilt Caerlaverock Castle.

In Douglas's Baronage (p. 303), this Umphryd Jardine is referred to, where it is said that "Elizabeth, daughter and heir-ess of Alexander Gordon, brother of U. Jerdyn of Applegarth, was married to Sir William Boswell, 1395; who got with her the lands of Craigincat, Easter and Wester Balglillys in the constabulary of Kinghorn and shire of Fife."

I have not investigated the origin of the family of Jardine, but the Umfryd here referred to, is the earliest I have seen, though I have no doubt they were settled in Dumfriesshire, at a much earlier period.

In an Instrument of Sasine of "Mattheo de Johnstone, in the 20 Merklands of Padinane, called Wisterraw, county of Lanarkshire, upon a charter from the crown, dated 19th Nov., 1455," one of the witnesses is William Jardine, Rector of Applegarth.

On the 15th January, 1503, John Weyr, agent for Alexander Jardin, grandson and heir apparent of John Jardin of Applegirth, compeared in the chapter-house of the church of Glasgow, before the commissaries of the right reverend Robert, Archbishop of

Glasgow, namely, David Choningham, official of Glasgow, Thomas Murhed, rector of Stobo, and others, and there alleged that the said Alexander Jardin was cited for that day, to see and hear himself acted ("actuari," fined?) in £300, on account of an obligation granted by him, as more fully contained in the protocol of the deceased, Mr James Dowglace, notary public, because he had refused to perform the penance enjoined upon him for acts of violence, done against the right reverend father Robert, in his own cemetery, and did not compear, though often cited; and to hear himself declared excommunicate, and that he had fallen under sentence of excommunication for such nefarious proceeding, or to allege as a reason why he ought not to be excommunicated, that he had been at that time in the service of our sovereign lord the king; for which John Weyr, in the name of the said Alexander Jardin, took instruments &c. (Translated from the "Protocol Book of the See of Glasgow," vol. ii., p. 45, No. 61.—Grampian Club.) [C. T. R.]

In Thomson's 'Acts of the Parliament of Scotland,' there are various references to the heads of this ancient family. In 1547, the laird of Applegirth could conduct into the field 242 followers. In the Act against Border reivers and broken clans, the Johnstones and Jardines are designated by an initial capital letter, as if pre-eminent in evil courses, and unruly behaviour. The laird of Applegirth is alternately forfeited and restored to his possessions; for complicity with factious leaders, and active participation in their plots.

The story of Spedlin's Tower, as connected with the Jardine family, is thus told by Sir Walter Scott, in the Introduction to the "Minstrelsy of the Scottish Border."—

"It is said that, in exercise of his territorial jurisdiction, one of the ancient lairds had imprisoned in the Massy More, or dungeon of the castle, a person named Porteous. Being called suddenly to Edinburgh, the laird discovered as he entered the West Port, that he had brought along with him the key of the dungeon. Struck with the utmost horror, he sent back his servant to relieve the prisoner; but it was too late. The wretched being was found lying on the steps descending from the door of the vault, starved to death. In the agonies of hunger, he had gnawed the flesh from one of his arms. That his spectre should haunt the castle was the natural consequence of such a tragedy. Indeed its visits became so frequent, that a clergyman of eminence was employed to exorcise it. After a contest of twenty four hours, the man of art prevailed so far as to confine the goblin to the Massy More of the castle, where its shrieks and cries are still heard. A part at least of the spell, depends on the preservation of the ancient black-lettered bible, employed by the exorcist. It was some years ago, thought necessary to have this

bible rebound ; but, as soon as it was removed from the castle, the spectre commenced his nocturnal orgies, with ten-fold noise ; and it is verily believed that he would have burst from his confinement, had not the sacred volume been speedily replaced."

Dr. Grierson of Thornhill informs me that the date of Spedling's Tower is 1528. The bible mentioned, is the edition "Imprinted at London by Robert Barker, and by the assigns of John Bell, A.D. 1634."

[J. H.]

The Early Ecclesiastical History of Dunbar. By JOHN STUART, LL.D., M.R.I.A., Secretary to the Scottish Society of Antiquaries.

To understand the ecclesiastical history of Dunbar, it is necessary to keep in mind that the country of Lothian in which it is placed, formed no part of the Scottish dominion till the early part of the eleventh century. Before that time the district known as Lothian formed part of Bernicia, and was ruled over by the princes of Northumbria ; while its people were of the same Saxon race as their subjects on the south side of the Tweed. The Celtic annalists of Scotland, or on the country on the north side of the Scot Water, refer to the district of Lothian as *Saxonia* ; and perhaps the earliest notice on record of Dunbar is in one of their chronicles, where, after relating the many invasions of Saxony by Kenneth Macalpine, towards the middle of the ninth century, we are informed that during one of them he burnt Dunbar and wasted Melrose.

We may infer that the origin of the place, as one of settlement, is to be attributed to the Dun or fort, which at an early period crowned its rocky point ; and on the site of which the castle of Middle-Age times came afterwards to be erected.

While Lothian formed part of the Northumbrian territory, it was subject in spiritual things to the Bishops of Lindisfarne, and the knowledge of Christianity was propagated among its inhabitants by means of the monastic colonies which drew their existence from the parent monastery on Holy Island. Among the most influential of the missionaries in this great work were St. Cuthbert and St. Baldred.

The monastery of the latter saint was at Tiningham, not far from Dunbar; and we learn from Simeon of Durham, that its territory extended from the Lammermuir to Eskmouth.

At a later period of our history the country came to be formed into parishes—or districts subject to the jurisdiction of single priests—when the monasteries and their missionary arrangements were superseded.

It cannot be said at what time Dunbar was constituted a parish, but it would seem to have been during the Saxon occupation, and before the Manor of Dunbar, with many other lands in Lothian, was conferred by Malcolm Canmore on Cospatrick, the expatriated Earl of Northumberland, who founded the great family of Earls of March and Dunbar. His son, the second Cospatrick, granted to the monks of Durham, at Coldingham, the churches of Edraham or Edrom and Nisbet, and he, as well as his successors, were great benefactors to the house of St. Cuthbert, at Coldingham, which, indeed, the Scottish King Edgar may be said to have founded.

The patron saint of Dunbar was St. Bey, a female saint of little fame, who is said to have led an anchoretical life in the Island of Cumrae in the Firth of Clyde, and it is not easy to follow the line of connection which led to the choice of her tutelage for a district which, at the period when it may be held to have become parochial, was under Saxon influence. The authorities for St. Bey's life are given in "*Kalendars of Scottish Saints*," by the Bishop of Brechin; and in the Breviary of Aberdeen she is celebrated in company with St. Maura. St. Bey seems to have been so fond of austere solitude, that her ordinary companions were the beasts and birds by whom she was surrounded. She was visited, however, by St. Maura, and the discipline which this saint drew from St. Bey, she imparted to a company of virgins associated with her in the religious life. St. Maura died at last at Kilmaurs, of which she is the patron saint; and St. Bey died in her island of the little Cumrae, where a chapel was raised over her remains, and where a ruined chapel associated with "*St. Vey*" still remains.

The Breviary records the following occurrence to show that St. Bey's repugnance to leave her island did not end with her life, but was manifested long after her death. A certain rector of the Parish Church of Dunbar, where St. Bey was held in veneration, having become desirous to possess some of her relics, and to transfer them to his own

church, came with a prosperous wind to the island; but having placed some of the saint's bones in a wooden coffin, and put them on shipboard, there arose such a tempest, that, after several attempts, he was glad to restore the bones and depart in peace without his coveted treasure.

When we bear in mind the eagerness displayed by the ecclesiastics of the Middle Ages to obtain for their churches the relics of saints who stood high in popular estimation, we may conclude that the rector of Dunbar was greatly disappointed at the issue of this adventure; but it is certain that, whether with or without her relics, the veneration for St. Bey was still fresh in the fifteenth century, for on one occasion, when King James IV. was at Dunbar, in May, 1497, we find a payment entered in the accounts of his chamberlain, of 20s to Mr William Sandilands "to ger say a trentale of messis of St. Bey."

A popular rhyme associates St. Bey with St. Helen and St. Abb, and insinuates that they had a contention among them which of their churches should be built nearest to the sea. According to the rhyme, St. Abb, or St. Ebba, built hers on the *nabs*, or cliffs, which overhang the sea at Coldingham. St. Helen built hers on the lea at Ald-Camus, while St. Bey (who comes to be called St. Ann) erected hers on Dunbar sands, and so got nearest to the sea.

There is a great confusion in these rhyming lines, as the sense is always regarded in such productions as secondary to the jingle; but if St. Bey could have been held as one of the school of St. Ebba with whom she is here mixed up, it would be much more intelligible how her memory came to be venerated in the district. The story in the Breviary seems, however, too definite to admit of such a solution; only it must be borne in mind that there was a great desire to appropriate all doubtful saints to the Scottish list at the time when the Breviary was compiled, and in that spirit St. Baldred has been pressed into the Scottish ranks as a disciple of St. Mungo, while there can be little doubt that he belonged to the Saxon school, and as such he is celebrated by Alcuin as *Baltherus, an Anchorite*, in his list of saints of the Church of York.

The ruins of the little church of St. Helen were pretty entire when they were examined in the year 1848 by Mr Muir, our great authority in ecclesiastical architecture. They were pronounced by him to be of late Norman char-

acter, and of a date not earlier than the first quarter of the twelfth century, although of course they might have replaced a structure of earlier date.

This little church was the Parish Church of Ald-Camus, which in later times was annexed to the parish of Colbrandspath. Among the many lands with which the Scottish Edgar endowed the house of St. Cuthbert at Coldingham, was the "mansio" or territory of Ald-Camus, and it is possible that the erection of the church was consequent on its acquisition by the monks, when the territory of Ald-Camus would become a parish. The grant to Coldingham was made in the year 1097—a date which synchronises very closely with that attributed to the ruined church by Mr Muir—and we may infer that these, with the other lands granted by the Scottish King, formed part of the royal territories which had been held in demesne by the Northumbrian Princes, and afterwards by their successors the Kings of the Scots.

The parish of Dunbar was one of great importance, and the most valuable of any within the diocese of St. Andrews. Besides the present boundaries, it originally contained several chapelries subject to the mother church of Dunbar, which in later time became parochial districts. These chapels were at Hederwick or Belton, at Pinkerton, at Whittingham, at Stenton, at Spot, and at Penshiel in the Lammermoor.

In the old taxations, the church of Dunbar, with the chapel at Whittingham, was rated at 180 marks; while Haddington, which originally was a much more extensive parish than it now is, comprehending a considerable part of Athelstaneford and a large part of Gladsmoor, and including several chapelries, was only rated at 120 marks.

From the earliest times, the Earls of Dunbar were proprietors of the whole parish, and patrons of the church and subordinate chapels. The establishment of collegiate churches commenced in Scotland about the middle of the fourteenth century, and becoming a fashion with the powerful nobles of the day, a large number of these institutions were founded within the century which followed.

The first collegiate church in Scotland was that of Dunbar, which owed its foundation to the piety and munificence of Patrick, ninth Earl of Dunbar, in the year 1342. This powerful nobleman, who, in right of his wife, became also

possessed of the title and estates of the Earls of Moray, was engaged in many of the political transactions and conflicts of the time of David II. He frequently went on pilgrimage to the shrine of St. Thomas a'Becket at Canterbury, and was the husband of the heroic Lady Agnes, daughter of the Regent Randolph, who will ever be recollected as "Black Agnes," the scornful and successful defender, in her husband's absence, of the Castle of Dunbar, against the besieging English.

The constitution of the Collegiate Church is set forth in a charter of confirmation by William, Bishop of St. Andrews, which is also sealed with the great seal of the Earl of Dunbar, and is dated on the feast of St. Matthew, 1342.

By it, the Parish Churches of Dunbar, Linton, Dunse, and Chyrnsyd, with their chapels, of the patronage of all which the Earl had the heritable right, were erected into a college church under the following scheme of government:—It was to have a dean, an archpriest, and eight canons. The deans and archpriests were bound to constant residence, except when called elsewhere by the Bishop or his chapter. The canons were also bound to make residence, under pain of loss of their share of commons and a third of the fruit of their prebends, if absent three months on end in one year, unless they had a dispensation from the Bishop. The fore-said dean, archpriest, and canons, whether resident or not, were to have priests continually residing in the said church in decent habit of canons-secular singing the offices according to the use of the Scottish Church by day and night, and every day celebrating two masses, one of the blessed Virgin and the other for the dead.

The dean was to be over the arch-priest, and canons, and servants, and to correct neglects or faults done within the precincts, and to maintain rule and discipline, he having ordinary jurisdiction under the bishop, with power to see that Divine worship was performed in a becoming manner. He was to receive as his prebend all the tithes and offerings of the Parish of Whittingham, where he was to have a vicar, presented and instituted by the bishop, with a salary of ten marks.

The arch-priest was to have care of the chaplains in the churches and chapels of the parish, except the Vicar of Whittingham. He was to receive the tithes and offerings of the altarages of the whole Parish of Dunbar, besides the

teinds of the Chapel of Whittingham, except the tithe of wool, sheep, and lambs, and to have all the kirklands of the parish, except those of Whittingham.

The canons were distributed as follows:—

Canon-prebendary of Dunbar—The Town of Dunbar.

Do. Pynkartown—The town of Pynkartown.

Do. Spot—The Town of Spot.

Do. Beltown—The Town of Beltown.

Do. Petcokkys [or Stenton]—The Town of Petcokkys (except what assigned to the arch-priest).

Do. Lintoun—Parish of Lintoun, where the prebendary is to have a vicar who was to receive a salary of ten marks.

Canon-prebendary of Dunse—Parish of Dunse, where he must have a vicar.

Do. Chyrnsyde—Parish of Chyrnsyde, where he must have a visar.

The other rents and revenues of the churches of Dunbar, were to be shared among the canons in residence for their use, saving the Bishop's right of visitation as in other churches of his diocese, under the jurisdiction of the Archdeacon of Lothian.

The rebuilding and repairing of the quire, was to lie on the dean and canons; of the nave, on the parishioners; of the quire of the churches of Lintoun, Dunse, and Chyrnsyde, on their canons. The dean and chapter were to have a common seal, and finally, the Earl of Dunbar, with his hand on the Gospels, at the high altar of St. Andrews, swore to the observance of the Constitution.

In the Register of the Great Seal, there is a Charter by King James IV., dated 9th January, 1501, in which a reference is made to St. Bey, the patron saint of Dunbar, and shows that the original dedication of the Parish Church in her honour, had not been forgotten.

By it the King confirmed a Charter of Mortification by George Inglis of Lochend, cousin and heir of the late Mr. Alexander Inglis, Archdeacon of St. Andrews, whereby he endowed a chaplaincy for the celebration of the Divine offices at the altar of St. Salvator, situated in the aisle called St. Salvator's Aisle, in the College Church of St. Bae of Dunbar.

The endowment sets forth the granter's motives to have been the love of God, and St. Mary Virgin, Mother of God, St. Salvator, and All Saints in Paradise, also the weal of the

soul of the late King of the Scots, James the Third, and Margaret his Queen, the prosperity of James the Fourth, now King, the weal of the souls of Alexander Inglis, archdeacon aforesaid, his uncle, and Robert Inglis of Lochend, his father, and for the souls of all those whom they in their lifetime, had injured, or been indebted to; and finally, for the souls of all the faithful departed.

The chaplain was to have ten pounds annually from certain tenements in Edinburgh, and the right of presentation was reserved to the founder and his heirs, but if they should fail to present, within fifteen days of the occurrence of a vacancy, the right of presenting was then conferred on the Abbot and Convent of Inchcolm.

The chaplain was tied to continual residence, and a provision made that, at the commencement of mass, which was to be celebrated daily, he should exhort the people to pray for the souls of the founders, saying a *pater noster* with the angelical salutation, viz.,—*Ave Maria*; and at the first washing of his hands the chaplain was to say the Psalm *de profundis*, with the usual prayers for the said souls. On the conclusion of mass, he was to sprinkle with holy water the founder's tomb in the said aisle, as well as the bystanders, according to use, and exhort the latter to pray for the souls of the founder and his father.

It may be mentioned, that besides the College Church, of which I have spoken, there was in Dunbar, a House of Red Friars, founded by Patrick, Earl of Dunbar, in the year 1218. This Earl, after enjoying his earldom for fifty years, died in the year 1232. After spending the festivities of Christmas with his children and neighbours, he sent for the Abbot of Melrose, and receiving from him extreme unction with the religious habit, he expired in his old age, and was buried in the church of the Convent of Eccles, which his grandfather, Cospatrick, had founded. There was also a monastery of Carmelites at Dunbar, which was founded in the year 1263, by Earl Patrick, the grandson of the Earl last mentioned.

From him the monks of May received large possessions in the Lammermoor—and from Cospatrick, his ancestor, they had a grant of a house and toft in Dunbar, with the accommodation of a ship for transporting their goods from the shore to their island home.

The civil history of the castle and town of Dunbar, would fill a volume; and I only glance at it so far as to say that

the latter naturally grew up under the shelter of the former, and that for several centuries the town was not a burgh of the King, but of the Earls of Dunbar and March. In the year 1369, King David II. granted to the Earl of March the right of having a free burgh at Dunbar, and free burgesses dwelling in the same, who should have the right of buying and selling skins, wool, hides, and other merchandise, together with a free port at Belhaven, and all the liberties and advantages which belonged to a free burgh and harbour. The burgesses of Dunbar were also appointed collectors of the King's Customs within the bounds of the burgh and harbour, and the boundary of the burgh was declared to be co-extensive with the Earldom of March. It does not appear when Dunbar was first erected into a Royal burgh, but a Commissioner from Dunbar first appears in the rolls of Parliament in the year 1469.

In the year 1618, King James VI. granted to the burgh a charter of confirmation, in which it is declared that its boundaries are the Earldom of March and Lordship of Dunbar, and the Baronies of Coldingham, Mordingtoun, Buncle, Langtoun, Innerwick, and Stenton. This boundary of course referred to the district within which the burgh had the exclusive privilege of trading.

Report of the Experimental Committee to the General Meeting of Tweed Commissioners, to be held at Cornhill, on 1st September, 1873.

The Committee have prosecuted their investigations in the interval which has elapsed since their last Report, but have hitherto failed to procure any conclusive evidence on the two doubtful points particularly mentioned therein, viz., the identity of Whitling and Bull Trout, and of Grilse and Salmon, in their respective different stages. And a further question, which had been considered to be settled long ago, viz., whether Orange Fins belong to the Salmon tribe—has now been added to the list of subjects requiring to be tested by actual experiment.

Only last year, Mr Geo. Young, then a member of the Tweed Commission, gave evidence to the effect that Orange Fins undoubtedly became Bull Trouts, thereby conducing to the conviction of a person charged with contravention of the law in Scotland; but although the same witness, corroborated by others, expressed, at a recent trial, the strongest opinion that Orange Fins were the young of the Whitling or Bull Trout, the evidence was held to be insufficient, and the subsequent stage in the existence of an Orange Fin, must still be determined by actual experiment. It is proposed to form a pond for this purpose, marked Orange Fins being placed and fed therein, under careful supervision, and any changes in their condition accurately noted by officers of the Commissioners.

In the interval between September, 1872, and June, 1873, there were marked :—

5	Salmon.
102	Grilse.
4	Bull Trout.
4	Whitling.
193	Blacktails.
177	Smolts.
611	Orange Fins.
1	Parr.

Total, 1097

And there have been recaptured fish which have been marked :

2 Blacktails converted into Whitlings,

1 do. do. Bull Trout,

besides others which had not changed their condition.

The appended Schedule gives the particulars of each case :—

1. It will be observed that a Blacktail marked in October, 1871, and recaptured in September, 1872, as a Whitling, increased in weight 3oz., and in length $2\frac{1}{2}$ inches in 332 days.
2. A Blacktail marked in October, 1872, and recaptured as a Whitling, in July, 1873, increased in weight 14oz., and in length $3\frac{1}{2}$ inches in 277 days.
3. A Blacktail marked in September, 1872, and recaptured as a Bull Trout, in July, 1873, in the river Dee, two miles from Aberdeen, doubled its weight (18oz), and increased in length 3 inches in 302 days.

These instances support the theory that Whitling and Bull Trout are different varieties or species of the Salmon kind, and that the name of Blacktail is descriptive of the earlier stage of both; or, it may be, that the term of Whitling and Bull Trout are really synonymous, the individual fish differing in greater or less degree.

The remark made in last report that Blacktails, recaptured up to April inclusive are found to have generally decreased in weight, or, at any rate, to have remained stationary, is corroborated by the experience of the past year. Of those marked in September and October, 1872, two were recaptured in February, one in March, and two in April, having been respectively 130, 134, 144, 175, and 190 days between the marking and recapture—the loss in weight being, in the several instances, 3oz., 4oz., 5oz., 6oz., and $5\frac{1}{2}$ oz. In length there was scarcely any variation. Those recaptured at a later period (with the exception of one caught in June, injured in the back-bone)—that is to say, in the months of July and September—had gained, as has already been shewn :—

	Weight.	Inch.	
(1) in 332 days,	3oz.,	and $2\frac{1}{2}$,	and become a Whitling, on Sept. 9,
(2) in 277 „	14oz.,	„ $3\frac{1}{2}$,	do. do. July 14-
(3) in 302 „	18oz.,	„ 3	do. Bull Trout, July 18.

(Signed)

R. H. HUNTLEY,

CHAIRMAN.

26th August, 1873.

APPENDIX.

SCHEDULE OF FISH CAUGHT IN THE RIVER TWEED WHICH WERE MARKED AND RETURNED ALIVE TO THE RIVER, AND WERE AFTERWARDS RE-CAPTURED.

No.	Species of Fish	Date of Marking	Where Marked	Weight	Length in Inch	Species of Fish when Re-captured	Date of Re-capture	Where Re-taken	Weight	Length in Inch	Difference in Weight	Difference in Length	Interval between Marking and Re-capture
1	Black Tail.	1871. Oct. 12.	Start.	18 oz.	14½	Whiting.	1872. Sept. 9.	Clayhole.	21oz.	16¾	3oz. incr.	2¼in. incr.	332 days.
2	Bull Trout.	— 1872.	Do.	36 "	18	Bull Trout.	1873. April 12.	Whitesands.	34oz.	20¾	2oz. decr.	2¾in. "	547 "
3	Black Tail.	Sept. 19.	Do.	18 "	15	Do.	July 18. 1872.	River Dee Aberdeen.	36oz.	18	16oz. incr.	3in. "	302 "
4	Do.	Oct. 10	Do.	12 "	12	Black Tail.	Nov. 1. 1873	Whiteadder	12oz.	12	—	—	21 "
5	Do.	—	Low Bells.	12 "	11½	Do.	Feb. 17.	North Bells.	9oz.	11½	3oz. decr.	—	130 "
6	Do.	—	Start.	14 "	12½	Do.	Feb. 21.	Gards Batt.	10oz.	13	4oz. "	½in. incr.	134 "
7	Do.	—	Low Bells.	12 "	12	Do.	March 3.	Outwaterstell	7oz.	12	5oz. "	—	144 "
8	Do.	—	Do.	12 "	12	Do.	April 3.	English New Water.	6oz.	12	6oz. "	—	175 "
9	Do.	—	Heughshield	14 "	13	Do.	April 18.	Do.	8½oz.	13¼	5½oz. "	¾in. incr.	190 "
10	Do.	—	Low Bells.	10 "	12	Do.	June 28.	Ethermouth.	4¾oz.	11¼	5¼oz. "	¾in. "	261 "
11	Do.	—	Start.	14 "	13	Whiting.	July 14.	Finchey.	28oz.	16½	14oz. incr.	3¾in. "	277 "
12	Salmon Smolt.	1873. April 17.	Coveshiel.	1¼ "	6½	Smolt.	May 14.	Carr's Rock.	1¼oz.	5½	—	—	27 "

(A) Back of this fish was broken.

Report of the Experimental Committee to the General Meeting of Tweed Commissioners, to be held on 6th September, 1875.

The Experimental Committee, in presenting their Report, think it best to follow the course adopted by them last year, and lay before the General Meeting their detailed proceedings and results, in the precise and accurate form adopted by Mr List, who personally superintends the marking of the fish, and himself enters the particulars in the Register in the presence of the Committee. These are now printed herewith for the years 1873-4 and 1874-5.

The points more immediately attempted to be set at rest by the investigations of the Committee are :—

1st, Whether Orange Fins belong to the Salmon tribe?

2nd, Whether Black Tails are the next stage of the Orange Fins?

3rd, What is the succeeding stage of the Black Tail?

4th, Whether Grilse remain Grilse, or are the preliminary stage of Salmon proper?

The fourth point remains as yet unsettled by evidence either way.

The first and second seem to the Committee clearly established in the affirmative. In corroboration of the fact that on the 17th April, 1873, an Orange Fin was marked, and recaptured as a Whitling on 1st June, 1874, the experiments conducted at Carham, both in the large pond (in which 133 Orange Fins were placed) and the two smaller ponds (where 23 Orange Fins were lodged on the same day, 7th May, 1874), have proved to the satisfaction of the Committee and a number of practical fishermen who have been admitted to the inspections, that Orange Fins pass through the stage of Black Tail, and thereafter assume the character of Whitling.

Whether the Whitling is merely the preliminary stage of the adult Bull Trout, or whether these are separate species or varieties of the Salmon kind, cannot be authoritatively determined, so far as the experience of the Committee has extended, although it is quite evident from the returns of recaptured fish that the Black Tail sometimes is the representative of the future Bull Trout and sometimes of the Whitling; in like manner as the Smolt in former years was identified as the "Grilse" as well as of the "Salmon" in its later stage.

The Committee hope that another twelvemonth's experience of the growth and changes in character of the fish still alive and in good health in the ponds at Carham, may enable them to furnish more complete information in 1876; and would suggest that renewed powers, and a grant of £20 towards their exercise, be accorded to the Committee for the ensuing year.

R. H. HUNTLEY, *Chairman.*

Berwick-on-Tweed, 2nd September, 1875.

APPENDICES.

Report to the Experimental Committee of the Tweed Commission.

I have the honour to report that the Experimental Committee had five meetings during the last twelve months on

25th September, 1873, at Union Bridge.

25th October, 1873, at Heugh Shield.

29th April, 1874, at Union Bridge.

7th May, 1874, at Carham.

8th July, 1874, at do.

The first three meetings were held to fish for Black Tail and Smolt, which were marked with silver wires and returned to the river alive—the following being the results, including Grilse Kelts, marked by the bailiffs in the spring of 1874 at Scotch New Water, Broad, Yardford, and Ethermouth Fisheries :—

	Grilse.	Bull Trout.	Black Tail.	Salmon Smolts.	Orange Fin.	Total.
25th Sep., 1873 ..	—	2	157	—	—	159
25th Oct., 1873 ..	1	—	260	—	—	261
29th April, 1874..	—	—	12	81	88	181
Feb. to May, 1874	142	—	—	—	—	142
Total	143	2	429	81	88	743

The Committee during the last four years marked 3147 fish, and 63 of them have been recaptured as stated below—

	Salmon.	Grilse.	Bull Trout.	Whitling.	Black Tail.	Silver White.	Salmon Smolts.	Orange Fin.	Parr.	Greyling.	Yellow Trout.	Total.
Marked in												
1870-71	18	72	132	5	206	9	2	172	31	1	1	649
1871-72	17	105	21	1	248	..	38	229	..	..	..	659
1872-73	5	102	4	4	193	..	177	611	..	..	..	1096
1873-74	..	143	2	..	429	..	81	88	..	..	..	743
Total.....	40	422	159	10	1076	9	298	1100	31	1	1	3147
Recaptured in												
1871-72	1	2	4	3	18	..	..	1	..	..	2	31
1872-73	..	..	..	..	10	..	1	..	..	..	..	12
1873-74	..	1	1	..	18	..	..	1	..	..	..	20
Total.....	1	3	5	3	46	..	1	2	..	..	2	63

In addition to the fish recaptured, 6 marked fish were found dead in the river, and the wires sent to me, a small reward being paid for each wire.

In the annexed return full details are given regarding the marked fish recaptured, and each of these fish was submitted to Members of the Committee and practical fishermen, a record thereof being kept.

The 20 marked fish recaptured give the following results:—

1	Orange Fin,	recaptured a	Whitling.
2	Black Tail,	„	Bull Trout.
4	„	„	Whitling.
12	„	„	Black Tail.
1	Grilse	„	Grilse.

—
Total—20

Seven of these fish are important—the first being of great value has been preserved, viz. :—

An Orange Fin, marked on 17th April, 1873, was, when recaptured on 1st June, 1874, a Whitling, having increased in weight 1 lb. 6½ oz., and in length 11 inches, in 1 year and 45 days.

A Black Tail, marked on 13th October, 1870, was, when recaptured on 5th June, 1874, a Bull Trout, having increased in weight 1 lb. 14 oz., and in length 8 inches, in 3 years and 235 days.

A Black Tail, marked on 25th September, 1873, was, when recaptured on 13th June, 1874, a Whitling, having, increased 10 oz. in weight, and 2¾ inches in length, in 261 days.

A Whitling, marked with a Black Tail wire, was recaptured at Tillmouth on 13th May, 1874; but the fishermen having broken and lost part of the wire with the number thereon, particulars as to the date of marking cannot be ascertained, but it is certain the fish was a Black Tail when marked.

A Black Tail, marked on 25th October, 1873, was, when recaptured on 23d June, 1874, a Bull Trout, having increased 1 lb. 2 oz. in weight, and 5¼ inches in length, in 241 days. This fish was sent to the Fish House at Berwick with a number of other fish, and it is not known at what part of the river it was re-captured.

A Black Tail, marked on 25th October, 1873, was, when recaptured on 1st August, 1874, a Whitling, having increased 8 oz. in weight, and 2¾ inches in length, in 280 days.

A Black Tail, marked on 29th April 1874, was, when recaptured on 11th May, 1874, a Whitling, having decreased 1 oz. in 12 days, but had assumed the Whitling appearance.

The other marked fish recaptured include a Grilse marked on 25th October, 1873, when ascending the river to spawn, and was recaptured on 1st April, 1874. When returning as a Kelt to the sea, it had, of course, decreased in weight.

The 12 Black Tails recaptured had apparently never left the river after being marked, and with four exceptions had decreased in weight.

The Committee having excavated a pond at Carham 42 feet in length, 19 feet broad, and $3\frac{1}{2}$ feet deep on the side of Carham Burn, from which it is supplied with water, had two meetings there—the first upon 7th May, 1874, when 133 Orange Fins were caught in the river Tweed and placed in the pond; and again on 8th July following, when 76 of the fish in the pond were taken with a net, and after examination returned to the pond alive. They were, with a few exceptions, in a plump, healthy condition, but had not assumed the Black Tail markings.

Bullock's liver has been supplied to them for food at the rate of 3 lbs. per week, increased to 6 lbs. per week after the 8th July; the fish have also a good supply of insects from the burn.

Another small pond or tank has been made at Carham, and supplied with water from a spring. In this pond Mr Huntley's fisherman (Thomas Sligh) placed a number of Orange Fins, one of which has assumed the Black Tail markings.

Reported by

G. H. LIST, *Chief Constable.*

County Police Office, Dunse, 15th Aug., 1874.

RETURN OF FISH CAUGHT IN THE RIVER TWEED WHICH WERE MARKED AND RETURNED ALIVE TO THE RIVER, AND WERE AFTERWARDS RECAPTURED :—

No.	Species of Fish	Date of Marking	Where Marked	Weight	Length in Inches	Species of Fish when Re-captured	Date of Re-capture	Where Re-taken	Weight	Length in Inches	Difference in Weight	Difference in Length	Interval between Marking and Re-capture
30	Black Tail	1870 Oct. 13.	Ethermouth	12oz.	12	Bull Trout.	1874 June 5.	Lamberton.	2lb. 10oz	20	1lb. 14oz. incr	8in. incr.	3yr. 235dy.
691	Orange Fin	1873 April 17.	Yardford.	1½	6½	Whiting.	" 1.	Tweed Mill.	1lb. 8oz.	17½	1lb. 6¼oz. incr	11in. incr.	1yr. 45days.
376	Black Tail	Sept. 25.	Heughshield	9 "	11½	Black Tail.	Feb. 18.	Broad.	7oz.	12	2oz. decr.	½in. incr.	146 days.
740	Do.	—	Do.	12 "	12½	Do.	March 6.	English New Water.	9oz.	13½	3oz. decr.	1in. incr.	162 "
364	Do.	—	Do.	9 "	12½	Whiting.	June 13.	Sandstell.	1lb. 3oz.	15½	10oz. incr.	2¾in. incr.	261 "
858	Do.	Oct. 25.	Start.	14 "	13	Black Tail.	Feb. 17.	Hollywell.	10¼oz.	13½	3½oz. decr.	¾in. incr.	115 "
1032	Do.	—	Cove.	10 "	12½	Do.	" 17.	Yardford.	9¼oz.	13	¾oz. decr.	½in. incr.	115 "
971	Do.	—	Do.	12 "	13½	Do.	" 17.	Wilford.	11¼oz.	13¾	¾oz. decr.	¾in. incr.	115 "
1085	Do.	—	Do.	9 "	12½	Do.	" 17.	Crow's Bat.	—	—	Size not taken	—	—
1076	Do.	—	Do.	8 "	13½	Do.	" 18.	Do.	9oz.	13½	1oz. incr.	¾in. incr.	116 days.
996	Do.	—	Do.	9½ "	12¼	Do.	" 21.	English New Water.	9½oz.	12¼	Nil.	Nil.	119 "
1066	Do.	—	Do.	12 "	13	Do.	" 24.	Whitesands.	7½oz.	12½	4½oz. decr.	½in. decr.	122 "
1072	Do.	—	Do.	9 "	12	Do.	" 27.	English New Water.	8½oz.	12¾	½oz. decr.	¾in. incr.	125 "
954	Do.	—	Do.	8 "	12	Do.	April 1.	Ethermouth.	8oz.	12½	Nil.	½in. incr.	158 "
124	Grilse.	—	Do.	4½lbs.	24	Grilse Kelt.	" 4.	Yardford.	3lb. 9½oz	24	14½oz. decr.	Nil.	161 "
Black Tail		—	Not known.	—	—	Whiting.	May 13.	Tillmouth.	2½lbs.	21	Part of Wire lost.	Part of Wire lost.	—
1087	Do.	1873 Oct. 25.	Cove.	9oz.	12	Black Tail.	" 19.	Broad.	8½oz.	13	½oz. decr.	1in. incr.	260 days.
906	Do.	—	Start.	8 "	11½	Bull Trout.	June 23.	River Tweed.	26oz.	16¾	1lb. 2oz. incr.	5½in. incr.	241 "
1092	Do.	—	Cove.	8 "	12	Whiting.	Aug. 1.	Sandstell.	16oz.	14¾	8oz. incr.	2¾in. incr.	280 "
1202	Do.	1874. April 29.	Do.	8 ,	11½	Do.	May 11.	Ethermouth.	7oz.	11½	1oz. decr.	Nil.	12 "

Report to the Experimental Committee of the Tweed Commission.

I have the honour to report that the Experimental Committee held five meetings since 15th September, 1874, viz:—

On 5th November, 1874, at Carham Pond.

On 14th April, 1875, at Do.

On 20th May, 1875, at Union Bridge.

On 27th May, 1875, at Melrose.

On 22nd July, 1875, at Carham Pond.

The meetings at Carham pond were held for the purpose of catching the fish kept therein, and having them examined by practical fishermen and by Members of Committee.

Upon each occasion the fish were found to have grown considerably, and the greater part had assumed the Black Tail and Whitling appearance—although, apparently, owing to their confinement in the pond, they had a darker appearance than fish of the same description taken from the river.

At each of the meetings, a fish taken from the pond was killed for preservation.

The meeting at Union Bridge was called for the purpose of marking Orange Fins, and the following fish were marked by inserting numbered silver and copper wires in their tails, viz:—

Orange Fins,	....	....	249
Salmon Smolts,	....	....	7
Total,	....	....	256

The Committee met at Melrose to ascertain if it is practicable, when a great number of Salmon Kelts have collected in the cauld pool there on account of dry weather, to catch them with a net and put them over the cauld. A few shots were rowed, and 8 fish caught; but the experiment was not successful, as the fish put below the cauld did not go down the river, but remained in shallow water within reach of poachers.

During the last spring the fisherman at Scotch New Water, Yardford, Ethermouth, and Broad kept alive in corfes the Grilse Kelts which they caught when fishing, and 91 of these fish were marked by the bailiffs in the tail with silver wires, and returned alive to the river.

Since my last Report, seven marked fish have been recaptured, of which full details are given in the annexed return; and with the exception of a Grilse Kelt recaptured a few days after it had been marked, the other fish had been marked in September and October, 1873, when they were Black Tails, and when recaptured they were Whitlings—the increase in size and weight, as shown in the return, being of great importance in solving the question whether a Whitling becomes a Sea Trout.

G. H. LIST, C.C.

County Police Office, Dunse, 16th August, 1875.

RETURN OF FISH CAUGHT IN THE RIVER TWEED WHICH WERE MARKED AND RETURNED ALIVE TO THE RIVER, AND WERE AFTERWARDS RE-CAPTURED.

No.	SPECIES of FISH	Date of Marking	When Marked	Weight	Length in Inches	Species of Fish when Re-captured	Date of Re-capture	Where Re-taken	Weight	Length in Inches	Difference in Weight	Difference in Length,	Interval between Marking and Re-capture
1056	Black Tail.	1873. Oct. 25.	Cove Sands.	8 oz.	12	Whiting.	1874. Aug. 17.	Finchie.	32½ oz.	17½	24½ oz. incr.	5½ in. incr.	296 days.
972	Do.	—	Do.	8 "	12½	Do.	Oct. 17. 1875.	New Mills .	12½ oz.	14½	4½ oz. incr.	2 in. incr.	357 days.
561	Grilse Kelt.	1875. March 11	Scotch New Water.	5 lbs.	26½	Grilse Kelt	March 16	Damford.	4½ lbs.	—	8 oz. decr.	—	5 days.
—	Black Tail.	1873. Sept. or Oct.	River Tweed	—	—	Whiting.	" 29	Twizel Boat-house.	21 oz.	17	—	—	Abt. 520 ds
955	Do.	Oct. 25.	Cove Sands	14 oz.	14	Do.	May 5.	Toddles.	22 oz.	17	8 oz. incr.	3 in. incr.	557 days.
925	Do.	—	Yardford.	10 "	12½	Do.	Aug. 7	Ethernmouth	35½ oz.	18½	25½ oz. incr.	6 in. incr.	651 days.
842	Do.	—	Start.	8 "	13	Do.	Do.	Yarrow.	28 oz.	17½	20 oz. incr.	4½ in. incr.	651 days.

NOTE.—The number on the wire inserted in the Whiting re-captured on 29th March having been obliterated, the weight and length of the fish when marked cannot be ascertained further than it was marked in September or October, 1873, and was then a Black Tail.

An Account of Lesbury Parish, Northumberland. By
the late GEORGE TATE, F.G.S., &c.

[In the revision of this article, I have supplied some omissions, several of them from the author's rough notes ; others by consulting some of the original writers. My own additions are placed in brackets. Mr. Tate has not given references ; but a few of these are now affixed from his notes. In general, however, he depends on the documentary volumes in Hodgson's "History of Northumberland," which are a sort of quarry to all future topographers ; on some of the publications of the Surtees' Society ; or on his own "History of Alnwick," to which the author intended this, and the history of some other neighbouring parishes, to be a subsidiary work. The Township of Alnmouth, in Lesbury parish, is reserved for separate treatment, when there is opportunity. J. H.]

THREE miles east-south-east from Alnwick, the village of Lesbury gives its name to the parish, and lies snugly sheltered in the lower portion of the vale of the Aln, which is here about three miles wide, with gently sloping banks, reaching in some parts 350 feet above the sea level. The river, in pursuing its winding course to the sea, cuts the parish into two nearly equal parts,—one on the south being in the east division of Coquetdale, and the other on the north, in the south division of Bamburgh Ward.

The parish is bounded on the north by Longhoughton parish, on the west by Alnwick and Shilbottle, on the south by Warkworth, and on the east by the German Ocean. Its form is an irregular square, about 3 miles long and broad. The area is 4337 acres, 2 roods, and 17 perches, the most of which is highly productive arable land, in a good state of cultivation. Blessed with a climate mild and genial, the fruits of the earth come to maturity in the lower parts of the vale, at an earlier period than in most parts of the county.

Prehistoric Remains. These are not numerous, but one group is of interest. In the year 1850, an ancient burial place was discovered in Hawkhill farm, on the top of Shell Law, which is 182 feet above the sea, and commands a view of Alnmouth Bay, and up the vale of the Aln, with Cheviot hills in the back-ground. There were six cist-vaens, or stone coffins, formed of rude sandstone slabs set on edge, and covered with a larger slab. They were of different sizes,

one being 5 feet 7 inches long, and 2 feet $8\frac{1}{2}$ inches broad ; and the others respectively 3 feet 6 inches, by 1 foot 10 inches broad ; 1 foot 10 inches, by 1 foot 4 inches ; and one was a double cist, divided into two compartments by an upright slab, and having one large slab covering both. Two urns were found ; one elegant in form—tulip shaped—a drinking cup, well made and elaborately and artistically ornamented ; and the other like a jar, of ruder manufacture, and scored with zig-zag lines.* At Burney Knows also, a double cist was found in 1823, and in each compartment was a small drinking cup.

About two hundred yards from the north end of Alnmouth, on the east side of the road, are remains of an ancient entrenchment. "It is," says Mr. McLauchlin, "an irregular quadrangle of about 90 yards north and south, by 70 east and west, with an entrance at the north-west angle, covered, as is usual in ancient earthworks, by a traverse of the ramparts." Relics have not been found in it, nor are the remains sufficiently characteristic to mark its age ; it is, however, probably a camp of an Ancient British period.

The Parish of Lesbury comprehends the townships of Lesbury, Hawkhill, Bilton, and Alnmouth, and the hamlet of Wooden ; but for the purposes of the Poor Law, Hawkhill, Bilton, and Wooden, are parts of the township of Lesbury. The whole was included within the Barony of Alnwick, and changed its superior lord with the changes of the barony ; but as the career and fortunes of the successive lords have been recorded in the *History of Alnwick*, it will be sufficient here to indicate generally the successive families who obtained possession of the barony and who, in consequence, were the feudal lords of Lesbury.

A short time after A.D. 1096, Yvo de Vescy was in possession of the barony of Alnwick, which in 1134 passed to Eustace Fitz-John, who had married Beatrix, the only child and heiress of Yvo. William, their son, who took the name of Vescy, succeeded to these estates in 1157, and they passed in succession to his descendants, first to Eustace de Vescy, next to William de Vescy, then to John de Vescy, and afterwards to William de Vescy, the last of the family connected with Alnwick and Lesbury ; for leaving no legitimate issue he bequeathed to Bishop Bek the barony of Alnwick, in trust for his illegitimate son William de Vescy, of Kildare ;

* See Proceedings of Berwicks. Nat. Club, iii., p.p. 63—67.

but this unprincipled bishop violated his trust, and after retaining possession of the barony for twelve years, sold it on Nov. 19, 1309, to Henry de Percy, a descendant of Josceline de Lovaine and Agnes Percy,* and since that time it has been held by their descendants, excepting during short intervals when it was confiscated for rebellion against the throne.

The history of the different townships will now be traced.

TOWNSHIP OF LESBURY.

It has an area of 1646 acres, 3 roods, 17 perches, most part of which is on the north side of the Aln; but on the south side are the farm of Hipsburn, and the mill and adjoining land. A detached portion of 1 acre 1 rood 21 perches is near the mouth of the river, within the township of Alnmouth.

There are no written records to shew that this township was inhabited either by the Ancient Britons, or by the Romans, or by the Saxon race; but from the sepulchral remains on Shell Law, we may infer that the Ancient Britons had hut dwellings here. Doubtless too the Saxons at an early period after their conquest of Northumberland formed a settlement at Lesbury; the name evidences this; for the termination *byrig*, altered into *bury*, is of Saxon origin; and indeed favours the view that the place was then of some importance. If the opinion of Mr McLauchlin is correct, that the prefix *les* is a form of the Celtic *Llys*, which signifies a court or a hall, we would then have in the name traces both of the Ancient British and of the Saxon inhabitants.† More important information is afforded by the charters of Alnwick Abbey, which shew that prior to 1145, Lesbury was the seat of the principal ecclesiastical establishment in the district; the chapels of Alnwick, Alnmouth, and Longhoughton were then subordinate to it; and therefore it is highly probable that here the chief thane of the district lived in his burgh or fortified dwelling. Indeed, Lesbury, with a genial climate, productive soil, well sheltered situation, and

* [Eighty-six librates and one-hundred-and-fourteen and three-quarter acres in Lesseberry, value £86 9s. 6d.: besides other lands, were reserved as part of the dower of Isabella wife of John de Vescy.—See *History of Alnwick*, I., p. 77.]

† [It may be only the English *less* or *least*. The place is spelled in documents; Letebyre, Lestebyrye, Lecebyr, Leterbyr. Lessebury, Latybury, Læsbury, Lescebur, Lesseburg, Lathebury, Lestebery, Lessebiry, Lessecebury.]

near to the sea, would be one of the places first occupied by the Angles. And here where the great thane lived, would, when Christianity was introduced, be the first church, which for some time would serve for the district around; but as new settlements were formed and population increased, other chapels would be built in Alnwick, Alnmouth, and Longhoughton, and supplied with priests sent from the parent church. The effect of the Norman conquest and the building of a great castle at Alnwick, as a residence of the Norman baron, stript Lesbury of its pre-eminence; and after Eustace Fitz-John founded, in 1145, Alnwick Abbey, and as part of its endowment gave to it Lesbury Church, with the chapels of Alnwick, Alnmouth, and Longhoughton, Lesbury church became subordinate to the Abbey, and lost its independent authority.

No lands in Lesbury township were granted by the barons of Alnwick on military tenure. There was a free tenant, there were bondmen and cotmen, there was a common—the folk-land—remaining from Saxon times, and there was a large area of demesne land in the hands of the lord. About the middle of the thirteenth century, it is recorded in the *Testa de Neville*, that William de Vescy held Aunemuve, Haukehill, Bylton, and Letebyre;† and that William de Falconer held there half a carucate of land on payment yearly of a sparrow-hawk. Passing on to 1373, we have fuller information from an inquisition, which states that Henry Percy held the manor and vill of Lesseberry, the site of which being waste rendered 12d. yearly in herbage; and in the same place 225½ acres of demesne land rendering 6d. yearly per acre, and 32 acres of pasture at 1s. per acre; and a water mill, rendering £10 13s 4d yearly; and that there were also 20 bondagia, each of which consisted of a messuage and 24 acres of land and pasture, 16 of which render each 13s. 4d. yearly; 4 lie waste and uncultivated, the herbage being worth 6s. 8d. yearly; § that there were also 11 cottagia, each worth 2s. yearly, and certain free tenants paying 14s. 11d. yearly, and other free tenants rendering 2s.; and that the profits of the Hallmote were worth yearly 3s. 2d.

† [In 20 Edw. I., William de Vesci had free warren in Houton, Lestbyrye, &c.]

§ [It must be borne in mind that these are depreciated valuations, occasioned by the devastations of war, and what the records call the destitution of the period.—See *Ber. Club's Proc.*, vol. vii., p. 65.]

Sir John de Strivelyn, a distinguished warrior, who, in 1335, commanded the English forces at the siege of Loch-Leven Castle, owned property in Lesbury, which he had obtained through his marriage with Jane, daughter of Richard de Emeldon; he held twelve acres of land in Sunderland flat or Lestbury flat, near Lesbury, on socage tenure, worth yearly twelve shillings;* and this passed by a settlement to John de Middleton and his wife Christiana, who were ancestors of the present Sir Charles Monk, Bart., of Belsay.†

The ancestors of the Carrs, of Ditchburn, held lands in Lesbury, in the sixteenth century and subsequently; they were descendants of the Carrs of Hetton and Newcastle; and important personages some of them had been. George Carr, of Lesburie, appears in Sir Rob. Bowes' list of gentlemen inhabiting the county in 1551, within the Middle March;‡ and in 1554, he was one of the commissioners for inclosures of the Eastern Marches. One of them, Robert Carr, who was a rebel in 1569, had previously held the mill of Ayne and houses for 30 years, at a rent of £10 14s. 4d. yearly; and another of them, John Carr, was owner of copyhold estates in Lesbury, in 1586. John Carr, who seems to have been his nephew, also held lands in Lesbury, and by his marriage in 1618 with Dorothy, daughter of Collingwood, of Great Ryle, he acquired West Ditchburn estate. Members of the family, however, continued to reside at Lesbury. John Carr, while living there, voted at the election of members of Parliament in 1722, on account of West Ditchburn. The latest record in the Lesbury Church registers relating to this family is that of the baptism of John, son of Mr Richard Carr, on Oct. 12, 1757. Mr Robert Carr, of West Ditchburn, is now the representative of this family in Northumberland.

Other free owners there were at Lesbury, in 1569. Richard Mydlam held a parcel of land called Levelands, by charter, at a rent of 5s. 2d.; and George Lawson and Richd. — held other lands at the rent of 2s. 3d. The Churchwardens held freely two selions of land in the fields of Lesbury, at the rent of 2d.§ Edward Alnewyke and Thomas

* [In 1390, three tenements in Alnmouth, a messuage, and 20 acres of land in Lestbury were in possession of "Jacoba uxor Johis de Stryvelyn Chr.]

† [Hodgson, vol. iii.]

‡ Newcastle Reprints.

§ [In the Cartington Rental, 21st Dec. 15, Hen VII. (1499) the vicar of the Church of Alnmouth, held, as a free tenant in Lessebury, certain cultivated land, called Redeles Flat, formerly belonging to John de Alnmouth,

Daund held arable lands lying separately in the common fields of Lesbury, at one time parcel of lands called Hippebourne Hill, at a rent of 7s. 10d.*

In the sixteenth century, Copyholders, who had been developed from the Bond-men and Cot-men of earlier times, were a numerous body in Lesbury. According to an enrollment, at a court held at Alnwick in 1586, thirty five copyholds were in that vill, all held on the same tenure, but differing in the extent of land belonging to them. One class, anciently called Bond-men, had besides a built tenement and a croft, a husbandland usually from twenty four to thirty acres or more; but the other class, anciently called Cot-men, is described as having a cottage and croft, and sometimes a garden, but with only one or two selions or ridges of land; both however enjoyed rights over the common, which belonged to the township. Each paid, according to ancient usage, a quit rent yearly, and on the alienation of the property, either by inheritance or sale, a fine was paid to the lord, the amount of which, fixed by ancient usage, was for the larger holdings, about three times the annual quit rent, and for the smaller, a sum ranging from 4s. to 7s. The following list of Copyholders will shew the names of the inhabitants of Lesbury three centuries ago:—

John Fiffe.....	39	4	Will. Haryston....	41	10
James Renwyck ..	35	10	John Tailor	44	6
Will. Wilkinson ..	40	0	Tho. Ladyman	32	0
Rob. Christine	49	5	John Rumpeth....	40	0
Tho. Tailor	40	0	Thos. Slegge.....	23	0
Tho. Elder	44	6	Edw. Smyth	43	6
Geo. Templyn	41	10	Will. Harrison	40	2
Rob. Grene	49	6	Tho. Page.....	40	2
Will. Mylne	40	2	Rob. Atkinson	41	2
Tho. Armourer ..	—	—	John Carr	43	1
Edw. Slegge.....	39	3	Will. Lawson	2	4
Will. Wilkinson ..	1	0	Isabella Robynson	2	6
John Todde	1	4	Tho. Milne	0	4
Rob. Tomlinge....	0	10	Tho. Shepherd ..	0	2
John Harkus	1	3	Will. Harryson....	0	7
Matthew Smart ..	0	7	Will. Cowper	2	8
John Beropp	1	3			

and rendered yearly to the lord, 9d; but the old rent was 2d; as a tenant at will, the vicar of Lessebury, held one messuage, and 1 husband land (42s), 1 cottage (5s), and a cottage (2s 6d), and rendered yearly at Michaelmas and Whitsuntide, 99s 6d.—Dickson's History of Alnmouth, p. 36.]

* Humberston Survey, p. 39. [In 40 Eliz. William Toppin leased Lesbury mill to Sir John Forster. (Calendar of Leases.)]

All these Copyholds have been extinguished ; but at what period this was finally achieved, we know not. The raid against this class of owners was commenced by the great barons, not long after the Reformation ; for the extravagant mode of living which then began to prevail, exhausted the resources of courtiers, and caused them to cast a covetous eye on the possessions of the humbler yeomanry ; and ultimately, in this district, the whole of these small though ancient estates, was absorbed into the large baronies ; and the descendants of those who tilled their own soil, and lived in freedom on its produce, sunk into a kind of servile condition.

Of some feudal customs and impositions there are glimpses in Lesbury. A Hallmote or Manorial Court was held there from an early period. I have seen the roll of one held in 1519. The inhabitants paid ten shillings yearly in 1569, from ancient use and wont to the lord of the manor, for a common brew-house ; and they sent Watchers to the Alnwick fairs, to be quit of paying tolls in the fairs and markets of that borough ; even at the present time two men are sent for that purpose by Lesbury and Bilton. For Cornage the township paid 16d. yearly. Claims were made by the lord upon the tenants, to carry various things to Alnwick Castle ; but such services were resisted or unwillingly given ; in 1682, eighteen of the inhabitants were dragged before the Alnwick baronial court, for not leading slates from Seaton Car to Alnwick Castle, and each was amerced from 1s. 8d. to 3s. 4d. Rent hens were a very unpopular charge, and raised a mob ; James Grey of Lesbury, was brought before the court at Alnwick, in 1695, by the collector, "for a rescue when he was executing his office in collecting the rent hens." Each township had to have its corn ground at the lord's mill, from which no inconsiderable revenue was derived ; for violating this feudal obligation, the millers of Lesbury mill, in 1686, brought before the court, the millers of Warkworth, "for fetching and carrying away several quantities of corn from the inhabitants of Alemouth, to be ground at their own mill of Warkworth, which ought to grind at Lesbury ;" and each was amerced 3s. 4d. [In respect to encroachments, in 1601, Sir John Forster had "enclosed ground called Merden Banks, and taken the growing hay belonging to Lesbury."]

Coming down to a more recent period, we find Thomas Fenwick, of Lesbury, Gent., included in a list of freeholders in 1628; and that the family of Coulter or Coulthard, held land in Lesbury for near to two centuries. Michael Coulter was one of the jury of the Court Baron, held at Alnwick, May 7th, 1690; he died at Lesbury on Feb. 23rd, 1722, aged 75 years. John Coulter, his son, in 1742, left to the poor of the parish, £20, which in 1786, produced £2 9s. 6d. yearly, the rent of a gallery in the church. Michael Coulthard of London, voted on account of his property in Lesbury at the election of members for the county, in 1826. After this the property was sold to the Duke of Northumberland.

Excepting $1\frac{1}{2}$ acres belonging to the Vicarage, 3 acres to the owner of the rectorial tithes, $4\frac{1}{2}$ acres to the school, and land belonging to the North Eastern Railway Company, the whole land of the township is in the possession of the Duke of Northumberland. There are eight farm holdings, differing in extent from 80 acres to 325 acres; and let on an average at 27s. per acre.

Lesbury is now a mere country village—long and straggling, chiefly composed of cottages. There are now in it, the vicarage, two farm houses, one inn, a large mansion, called Lesbury House, a blacksmith's shop, a school, and 46 cottages. Thirty one of these cottages belong to the Duke of Northumberland, and to all of them land is attached; the quantity in 14 of them exceeds three acres, and one has as much as $6\frac{1}{2}$ acres; 12 of them have from $\frac{1}{2}$ an acre to 1 acre, and 5 others have less than $\frac{1}{2}$ an acre. There are 15 cottages besides, which belong to other owners.

Lesbury, Hawkhill, Bilton, and Wooden townships, are united for the purposes of the Poor Law; the whole in 1870 were assessed at a gross rental of £7846 1s. 7d., and at a rateable value of £7331 8s. 9d.; the rate in that year was 1s. 7d. in the pound, amounting to £581 9s. $1\frac{1}{2}$ d.* The population in 1801, amounted to 524, in 1811, to 505, in 1821, to 576, in 1831, to 561, in 1841, to 628, in 1851, to 750, in 1861, to 750, and in 1871, to 814. The increase in 70 years has been 55 per cent., or an annual increase of about 4 persons.

The School is under the government of the vicar and the four and twenty of the church; it is supported partly by the rent of four and a half acres of land at Pine Hill, left

[* In 1874, Lesbury was assessed for County Rate, at £9003.]

in 1718 to the school by Henry Strother of Bilton;* and subscription and school fees. The endowment and subscriptions amount yearly to about £5; and the school fees are three or four pence weekly, from each pupil. The attendance in 1870, averaged 65 scholars.

Lesbury House was built by — Hay, a merchant of Alnmouth, and tenant of Lesbury Mills. Wm. Hay of Alnmouth voted at the election of the county, in 1774. The Hays were Presbyterians, and attended the Pottergate Meeting House at Alnwick. One of them had an entire double seat to himself, curtained round, so that when tired with sitting, he could pace backward and forward during the sermon. John Herdman, M.D., married Miss Hay, the daughter of C. Hay, and on the death of his father-in-law, succeeded to great wealth, and he lived for several years at Lesbury House. He was born in Fifeshire in 1762, graduated at Edinburgh, and became a licentiate of the Royal College of Physicians, London. For several years he practised in London, and was one of the physicians in ordinary to His Royal Highness the Duke of Sussex; and he was the author of several medical treatises. He altered his opinions on medicine and abandoned his profession, considering that to “minister to nature and to conform to her operations by sobriety and regularity of life, were the only safe means to secure health;” and in his own conduct he acted according to this principle rejecting the use of medicine, even during his last illness. After abandoning the medical profession, he was ordained a minister of the Church of England; and he frequently preached in the churches of Alnwick and the neighbourhood. He was a liberal supporter of public institutions, a patron of the fine arts, and a kind benefactor to the poor. He died at Lesbury on Feb. 26th, 1842, aged 80 years.† [Lesbury House belongs to the Duke of Northumberland, and is occupied by Major Browne, who has, at his own expense, enlarged both it and the premises.]

Lesbury Church. It is pretty certain that there was a church at Lesbury in Saxon times, when it was the most important in the district. Evidence of this is furnished by the Saxon Cross found in Alnmouth chapel, which was subordinate to Lesbury church, and it is confirmed by the

[* A field beyond Hipsburn, called Coulthard's field, of about 7 acres, was left by one of the Coulthards, who died in 1790, to the School of Lesbury. This endowment appears to have been lost.—Mr. Tate's Notes.]

† Table Book, v., p. 357.

foundation to Alnwick Abbey in 1147, by Eustace Fitz John, who gave to the Abbey the church of Lesbury, with all its appendages, and particularly with the chapels of Houghton, (Longhoughton) and of St. Waleric (Alnmouth), with all their tithes of corn, salt-works, and mills, and the chapel of Alnwick, with its appendages. About sixty years subsequently, William de Vesey, by charter, gave to the Abbey his fishery of Lesbury, which had yielded him £10 yearly.* After this the history of the church is chiefly merged in that of the Abbey. It remained, however, a vicarage, with the lesser tithes appropriated to the support of the vicars, who were chosen by the abbot from among the monks connected with Alnwick Abbey. The names of a few of the vicars have been preserved in the Durham Records.

In 1329, Robert de Emeldon was vicar, and he gave by charter to Alnwick Abbey, one toft and a quarter of an acre of land in Alemuth, and a toft and seventy acres of land in Yetlington and Callaly, and two messuages in Newcastle.† After his death in 1342, John Cernare, canon of the abbey, was appointed vicar. John Vigorous occurs in 1377; and Thomas Wollour is stated to have resigned the vicarage in 1418, when John Doddington succeeded, after whose death in 1420, John de Alnwyk, canon, was instituted vicar. On his resignation, in 1423, Brother William Marshall was admitted to Lesbury, but in the same year it is recorded that Robert de Middleham was appointed vicar of Lesbury. In 1426, John de Alnwick, a regular, was admitted vicar on the resignation of William Marshall.‡ On the death of John de Alnewyk, July 24th, 1433, William de Eslyngton was instituted vicar. Sir John de Alnewick occurs as vicar in 1502;§ and in 1531, Robert Kendall resigned the vicarage of Lesbury, on being elected abbot of Cokysande. Thomas Wynfelde, chaplain of the church of Alnewicke was instituted vicar of Lesbury, on Oct. 4th, 1531,||—the last appointment prior to the Reformation.¶

* Hist. of Alnwick, vol. i., Appendix, p. ix.

† Ibid, vol. ii., p. 9.

‡ Langley's Register, [Canon William Marshall was instituted to Chatton Church on July 8th, 1427.—Ibid.]

§ Savage Vis.

|| Durham MSS. Ordinations [According to Mr Dickson in History of Alnmouth, p. 38, Wynfelde was presented 11th Oct., 1531, upon the resignation of Kendal—and instituted 24th Oct., 1531.]

[¶ Other churchmen connected with Lesbury, by name at least, are :—John de Lessebire, ordained monk of Alnwick Abbey. in 1315; and Nicholas de Lessebire, ordained deacon at Auckland in 1337, upon the title of the Chantry of the Chapel of St. Catherine of Tyllemuth, given him by Walter Crayk.—Raine's North Durham, p. 324.]

Of the value of Lesbury church in the olden times, there are a few notices in the public records.

When Pope Innocent IV. made in 1254, a taxation on Ecclesiastical property, Lescebury with its chapels was estimated at £100 yearly; about 1291 the value is put down at £70 yearly.* In Kellaw's register about 1312, Lescebury rectory with its chapels of Alnewyk, Houghton, and Alnemouth are valued at £105 4s., and the vicarage at £10 4s.; and in 1341, when a royal tax was collected, the church of Letybery, with the chapels Howton, Alnwick, and Alnemouth, with the vicarage of Letybery and the ninth of corn, wool, and lambs, of the parish of Letybery were assessed at £76 13s. 4d.; and so assigned to Lord de Percy, by the Bishop of Durham and Ralph de Neville.†

After the Reformation, the corn tithes of the townships of Lesbury, Hawkhill, and Bilton, were, according to a paper survey made Dec. 23rd, 1539, let to Sir Cuthbert Ratclif, knight, and were declared worth £12 6s 8d., by the year. The tithe fish coming by the cobles, going upon the sea at Alnmouth, were worth yearly £6 13s 4d; and the tithe fish of salmon got in the Ale water, were worth 10s.; and both were let to Ratcliff. The Minister's Accounts of the 31st and 32nd of Henry VIII., notice eight tenements in Lesbury, belonging to the Abbey, yielding an yearly rental of 35s 4d. Two parts of the fishing from the west end of Alnemouth Church to Alnwick Mills, and from the aforesaid church to the sea, were demised for 40 years, at 53s 4d. yearly, to George Carr of Lesburie, and Eliz. Hereford of Barne Yards. Out of the Church of Lesbury, 12s were payable yearly to the Archdeacon of Northumberland. These rentals were little more than nominal, for they were far below the real value of the property, which, however, still belonged to the crown, till 1634, when Charles I. granted to Francis Morrice and Francis Phillips, the tithes of grain, parcel of the rectory of Lesbury, arising in the towns of Lesbury, Hawkhill, and Bilton, at the rent of £12 6s 8d yearly, which was paid to the crown till 1652, when the fee-farm rents of the district were sold to John Sweeting, citizen and stationer, London. Belonging also to Alnwick Abbey, were eight tenements in Lesbury, one each held by the following;—John Slegge, at an yearly rent of 7s., William Watson, at 3s. 4d., John Legge, at 2s., Robert Shepherde, at 7s., William Grey, at 7s., Thomas Thompson, at 2s., John Watson, at 5s., Robert Harrison, at 2s. At Alnmouth were two tenements, one held by Robert Pigdon, at a rent of 10d., and the

* Taxatio, Jan. 13th, 1291.

[† Nonarum Inquisitiones, temp. Edw. iii — Temp. Elizabeth, 1577, Vicarage Lesburie £8 2s 10d, (£26 alias £40 added in the middle of the 17th century.) — Barnes Originalia. — In 1535, Lesbury Vicarage, valued at £6 2s 10d., the tenths 6s 3½d — Dickson's Alnmouth, p. 38.—In 1547, the Archdeacon's fee from Lesbury was 13s 4d.—Ibid. p. 44.]

other by William Anderson, at 10s. ; and at Bilton, one tenement was held by John Sheperde, at the rent of 10s. Early in the seventeenth century, Robert Brandling purchased along with other tithes, the tithes of Lesbury ; but in the course of time the property in them was split into shares. Part of them passed to Edward Cook, son-in-law of Ralph Brandling, and eventually to Isaac Cookson, who sold this share in 1824, to the Duke of Northumberland. Another part passed to Jane Forster, a granddaughter of Ralph Brandling, and afterwards by inheritance, to Robert Ogle of Eglington, by whose descendant it was sold to the Duke of Northumberland. Francis Brandling, in 1725, sold five-twelfth parts of the tithes of Alnwick and Lesbury, to William Coulter of Lesbury ; whose grandson William conveyed them to Robert Gelson, who sold them to Isaac Cookson. Richard Brandling in 1712, conveyed to Francis Forster, one-fifth of the Lesbury tithes, which in 1717, passed to Thomas Ilderton ; and it is now held, along with another share acquired in 1776, by his descendant, the Rev. Thomas Ilderton, vicar of Felton, and now of Ilderton. According to the poor rate schedule of 1870, the rent charge for tithes in the Lesbury and Hawkhill townships, amounts to £370 4s., and belongs to John Cookson, of Meldon, and the rent charge for tithes in Bilton township, amounting to £313 2s 6d., belongs to the Rev. Thomas Ilderton.

The Vicarial tithes were continued as an endowment of the church, which is described as "dedicated to St. Mary, a discharged vicarage, valued in the king's books at £8 2s 10d, the king being patron." These tithes have been commuted into a rent charge, which, in 1870, amounted to £281 13s 5d. The churchwardens in 1569 held freely two selions of land in the fields of Lesbury at a quit rent of 2d yearly. A part of Lesbury moor, which was in Shildykes township, also belonged to Lesbury church ; it consisted of a cottage and twenty-five acres of land ; but, some years ago, this was exchanged with the duke of Northumberland for other property in Lesbury township.

We will now trace the succession of vicars, subsequent to the Reformation.

Thomas Winfield, the vicar in Roman Catholic times, conforming to the new religion, continued vicar of Lesbury till his death. On October 2nd, 1556, Edward Adthe succeeded him. Before his death he resigned. A will of Edward Athey, clerk, made in 1565, is printed in the Surtees' Society publications ; several bequests are left to the Atheys of Longhoughton, and to the Taylors ; among others he leaves to his sister Agnes Taylor, widow, one old Riall, and to Robert Taylor, vicar of Lesbury, his best gown ; the residue of his property is also left to them whom he appoints as his executors. Tailyour was deprived by Queen Elizabeth. After Taylor, John Lademan, or Ledeman, was

instituted vicar 11th May, 1579; and he occurs again in 1584. John Emsall appears at the visitation of 1608*, and not long after, in 1609, he was succeeded, 26th August, by Patrick Mackelvyan, A.M.

This vicar has been made famous by Fuller, who says of him, "That being a hundred-and-ten years old, his hair came again as a child's, of flaxen colour; that he had three teeth cut within two years, which were not then come to perfection; that whereas forty years before he could not read the biggest print without spectacles, there was then no print nor written hand so small but that he could read it without them; that he was so strong as he had been twenty years before; that he preached and prayed an hour and a half without any notes, and was very hearty and cheerly at that age, but stooped much. Being asked how he preached so well with so few books, and was so cheerly with so few acquaintance, he answered 'Of friends and books good and few are best.'" Of this singular man we have local records which shew that he was remarkable also for being very quarrelsome and litigious.

He was born in Galloway, Scotland, in the year 1568; and this we learn from his evidence against Robert Brandling, before the Court of High Commission in 1634, when he stated that he was then aged three score and six years. As early as 1610 he appears at the Archdeacon's visitation, charging Richard Widowes, Thomas Dand, and Thomas Storth with abusing him—the vicar.† He had a dispute in 1630 with Robert Brandling, who was lay impropiator of the rectory of Lesbury, and who charged him before the Court with converting to his own use corn and grain growing on ground called the Brown Rones, for which close 4s yearly rent was paid to the earl of Northumberland. John Carr gave evidence, that, about eight years previously, an inclosure and division were made of the town fields of Lesbury, with the consent of the lord and the inhabitants; and that Mr Mackelvyan had this close, containing ten acres, settled on him during his incumbency, on consideration of his maintaining yearly a bull and a boar or brawn, at his own cost, for the use of his neighbours and parishioners; but John Carr added that he himself never consented to the inclosure, that it was never part of the glebe land of the vicarage, but that it was part of the common pasture of the town. William Aumore, bailiff and collector of the earl's rent also gave evidence and said that in 1629 he received from Mr Mackelvyan 3s as rent of the close, or at least pennyworth for the said rent; for Mr Mackelvyan promised to him certain hens in lieu of it, and that he has a lease of the grounds in writing.

* [Sir John Hemsall appears as Vicar in 1586, in a general survey of the possessions of the Earl of Northumberland. See *History of Alnmouth*, p. 53.]

† Durham MS.

With Robert Brandling he engaged in other fierce conflicts. On Sunday, July 16th, 1632, Brandling, after hearing prayers in Lesbury church, appointed Thomas Thompson, in the presence of the gentlemen of the parish, to pull down the clerk's stall, and build there one for himself; but the vicar told him, that neither he nor any other person save the bishop could displace the clerk of his seat. Brandling very angrily replied, that the proudest bishop in England durst not meddle with his inheritance, meaning Lesbury chancel, and that if Mackelwyman meddled again, he would likewise pull down his seat and reading pew; he called Mackelwyman Galloway rogue, and threatened to lay him in prison till he starved and stinked.

Mackelwyman appears again in 1637, as plaintiff before the Court of High Commission, charging William Carr, gent.,—that he did disgracefully call him, being a minister of God's Word, thief, carle, and Galloway knave, and in a threatening manner said unto him, "Sirray, in derogation of his function and priesthood, and did likewise scandalise his wife and call her a whore." The scene took place in Fareinfall, part of Lesbury Fields. On the part of the defence, Robert Gray said that Mackelwyman was setting out the tithe corn before Carr came, and after Carr did come, both fell at words about the tithing, Carr reproving Mackelwyman for setting it out before he came, and railing against him and his wife, after which Mackelwyman called Carr a thief for saying so. The court considered the charge proved, and sentenced Carr to pay costs and make submission and acknowledgement before twelve of the principal inhabitants of Lesbury, at such time and place as Mr Mackelwyman shall appoint.

Mackelwyman figures also repeatedly in the baronial courts, in 1654 to 1658. He was amerced 6s. 8d. for six several pound breaches, and for taking his geese out of the pinfold; and 12d. for overstinting the common, where he had no eatage—20d. for a pound breach made by his servant Alis Huggin—3s. 4d. for another pound breach made by the same servant, and taking his mare out of the pinfold—and another fine for a night layer with his mare in the West Field. There has been exaggeration as to his age; Randal represents his age at death 112 years; but as he died in 1659, he was then aged 101 years. Some of his descendants lived nearly half-a-century later in Lesbury; in the church register it is recorded that James Mackelwyman was buried in 1699, and Agnes Mackelwyman on March 17th, 1701.

[Mr. Tate deals rather hardly with the famous centenarian, who stood up so stoutly in a rough age. to maintain his supposed rights. More about his history may be found in the "Memoirs of Percival Stockdale," vol. i., p.p. 146—153. Mr Stockdale has preserved the following reminiscences. "He passed a part of his very long life in the reign of Charles II. The plague which

afflicted London* in the reign of that sovereign, reached to Lesbury; and occasioned a considerable mortality in our village. Those of its inhabitants who were infected with the dreadful disease, were removed to tents, which were erected for their reception in the neighbouring moor—there our pious, and venerable pastor attended them with great assiduity;—he consoled them with his prayers offered for them to the throne of grace; and assisted in procuring such medicines as their malady required.” (p. 154.) He has also some particulars about one of his daughters and her husband, which are curious, and not generally known. “I have been industrious, he says, but in vain, to find the spot where this venerable clergyman was buried. His grand-daughter was buried in the northern extremity of the church-yard, opposite to my parlour window; and it is not improbable that this was the place of his interment. I had her tomb-stone taken up, as I supposed that some inscription might have sunk, through time; but no letters were found. On the top of it is the name of William Gair, who died on the 27th of May, 1749. This man married the grand-daughter of Patrick Makelwian. She kept a school in the house which is now the poor-house of the parish of Lesbury. The best recollected characteristic of her memory is, that she was a terror of a school-mistress; a female Busby in severity; but not, I apprehend, in learning. William Gair, her husband, was a carpenter; and in *one* instance, he exercised his profession in a very remarkable way. He made a coffin for himself, and another for his wife; which were lodged in his house many years before either of them died.” p. 152.]

During the Commonwealth, a survey, usually called the Oliverian Survey, was made of the Northumberland churches in 1650; regarding Lesbury it says: “That the parish of Lesbury is a vicaridge, the late Bishop of Durham patron thereof, Mr Patrick Macklewyen serveth the cure there, and the said vicaridge is of the yearly value of thirty and five pounds; that the chapell of Aemouth belongeth to the said parish, and it is fitt that Shilbottle Towne, Whittal, and Woodhouse be united and added to the said church of Lesbury.”†

William Coxe next appears as vicar in 1663, and he was succeeded on Jan. 11th, 1666, by John Falder, who at the same time held the vicarage of Shilbottle; “a man of good learning and unblameable life.” The Rev. Will. Fenwick, A.M., follows in 1673, and his name occurs in an agreement in 1688; he also at the same time held Shilbottle. The Rev. James Forster was inducted vicar in 1691; he also held Shilbottle; he died in 1712,

[* The plague ravaged London in 1665.—Evelyn’s Diary.]

† In 1661, August 14, Edward Shepherd, George Wardle, John Morrow, Wm. Brown, were the old churchwardens; Alex. Page, Edw. Wood, John Murray, and William Armourer, were the new churchwardens.—*Visitation*,

and was buried on August 27th. He must have died poor, for an order was made by the session of Shilbottle parish, for paying his widow twelve pence weekly; and therefore on October 29th, 1717, the minister, churchwardens, and four-and-twenty of Shilbottle ordered an assessment of nine pence per farm for this object.

The Rev. Edward Shanks, who was inducted vicar on Nov. 8th, 1712, was also vicar of Shilbottle; he voted in 1722 at the election of members for the county. The Rev. Lawrence Carr appears in the church register as vicar on April 15th, 1725. The Rev. George Woofe was transferred from Shilbottle to Lesbury vicarage in 1726, and he died in 1749. The Rev. Nathaniel Ellison, A.M., was inducted on Jan. 12th, 1753, and died on Feb. 27th, 1775; he held also the vicarage of Whelpington. The Rev. W. Forster, A.M., was inducted on June 6th, 1775, and died, I believe, in 1784. He was a descendant of the Forsters, of Buston. His sons and daughters lived in Alnwick many years; one son, Joseph, after realising a fortune, as a broker in London, and living thirteen years in Alnwick, an active and liberal supporter of its charities, succeeded to the estates of Dr Gordon Joseph Forster, of Newton-by-the-Sea, and of Buston, who died 18th February, 1856, aged 86 years; which on the death of Joseph Forster, on November 3rd, 1869, at the advanced age of 88 years, were inherited by John Magenis Forster, Esq., a grandson of John Forster, and great grandson of the vicar of Lesbury. The next vicar was a man of some literary distinction.

The Rev. Percival Stockdale, who was presented with the vicarages of Lesbury and Longhoughton in 1784, was born at Branxton, on October 26th, 1736, the only son of the Rev. Thos. Stockdale, the vicar of that place. He was educated at the Alnwick and Berwick grammar schools; and afterwards attended St. Andrew's University about one year; but after the death of his father, he became second lieutenant in the Royal Welsh Fusileers, and served in the expedition against St. Philip in Minorca. His regiment being ordered abroad, he resigned his commission in November, 1757; and two years afterwards he was ordained a deacon of the Church of England; and went to London, where he enjoyed the society of Dr Samuel Johnson, Goldsmith, Garrick, and other literary men of reputation. For several years he had to depend chiefly on his literary labours for his sustenance. His life was very troubled, irregular, and unhappy; he admits he was idle and advanced fast in folly. For a time he was curate of the vicar of Berwick, "waging" he says, "for five years determined war against his own credit and happiness." He was relieved from his difficulties by his preferment to the vicarages of Lesbury and Longhoughton. A remarkable display of his vanity remains in the Lesbury register; for after chronicling his induction he adds, "*Un grand nom vaut plus que toutes les*

epithetes." He was twice married; and while his first wife was living he went to the continent with Miss Christiana Buck, whom, however, he married after his first wife's death; but from her too he soon separated. After being settled at Lesbury, a hoax was played upon him; he was informed by letter that his wife had died, and that her remains had been sent to Alnmouth, by ship, for burial at Lesbury. Rejoiced at the news, he prepared for her funeral, and went aboard the vessel on its arrival; but to his horror he found a living instead of a dead wife. "The Dead Alive again," a farce on the subject, written by Thomas Collingwood, was printed and acted at Alnwick. He died at Lesbury, on September 14th, 1811, aged 78 years, and was buried at Cornhill. He was a voluminous author and enjoyed some reputation in his own day, but his works are now neglected. He wrote poems, sermons, political pamphlets, memoirs, criticisms, and essays. A life of Waller was held in considerable esteem; and his largest work "Lectures on the Poets," may even now be read with pleasure and profit. His autobiography, in two volumes, dedicated to his friend Miss Porter, is interesting to north-countrymen. [For other notices of Stockdale see his *Memoirs*, 2 vols 8vo., London, 1809, where there is a list of his writings;—*Quarterly Review*, vol. i., p. 371, May 1809; *Memoir* by Miss Jane Porter, in *Nichols's Literary Anecdotes*, vol. viii., p. 18;—*Raine's North Durham*, p. 324, note;—*Disraeli's Calamities and Quarrels of Authors*, p. 219;—*Mackenzie's History of Northumberland*, vol. i., pp. 359-360;—*Local Historian's Table-Book*, vol. iii., pp. 109-111;—*Tate's History of Alnwick*, vol. ii., pp. 93-94.]

The Rev. William Procter, A.M., who was master of the grammar school and curate of Alnwick, was inducted vicar on August 6th, 1812; he also obtained the vicarage of Longhoughton; he died March 19th, 1839, aged 77 years. Of this amiable vicar I have given a short memoir in the *History of Alnwick* (vol. ii., pp. 94-97.) The Rev. Oswald Head was inducted vicar on June 4th, 1839; he was also rector of Howick, and died 1st February, 1854, aged 55 years. The Rev. Charles Dowson succeeded, but resigned the vicarage in 1858. The present vicar, the Rev. Edward Lawrence Marrett, M.A., was inducted on September 17th, 1858.

Of the Saxon or early Norman church, which was in existence in 1145, when it was given to Alnwick Abbey, there are now no remains; for the present structure was erected in the beginning of the thirteenth century, in the Lancet or Early English style of architecture, and it is but a poor specimen of the period. Churchwardian alterations had been made in the course of last century; but about 1854, a rate of sixpence in the pound having been collected for the purpose, it was extensively repaired and restored under the direction of Mr Salvin; the south wall was rebuilt;

the arch between the nave and tower was heightened and reconstructed ; the nave arcade was renewed ; the roofs of the chancel and nave were raised ; windows were reopened and restored ; and the tower roof was altered. A square tower attached to the nave at the west end, is but little altered, and is a plain stern structure, with lancet windows on the south and the west sides, but with an unbroken wall on the north ; the new pyramidal slate roof, however, gives to it a dove-cote look. The entrance porch at the south west end of the nave is modern. Small simple lancet windows in the south and north walls of the nave and chancel are restorations of the original windows : but the large east window of the chancel having three pointed lights with cusped headings, a copy, I understand, of some Perpendicular window, has replaced one of the churchwardian style. It is filled with stained glass ; in the centre light is a figure of Christ, and in the others ornamental designs in somewhat gaudy colours.

The interior of the church is more impressive than the exterior. The area is oblong, about 83 feet in length, and where widest 35 feet broad. The chancel, which is proportionally very long, being more than half the length of the area, is divided from the nave by an acute pointed arch, resting on plain imposts and round pillars. An arcade of pointed arches is between the nave and the chancel and a north aisle ; but the south-east portion of the chancel is enclosed as a vestry-room. [For a plate and plan of Lesbury Church see Mr F. R. Wilson's *Survey of the Churches of Lindisfarne*, p. 124.]

There are a few memorial slabs and tablets in the church, but none earlier than 1708 ; the most interesting are the following :—

HERE LIETH UNDER BURI
ED THE BODY OF ARTHUR
STROTHER OF BILTON B
ANKS WHO DEPARTED
THIS LIFE THE 26TH DAY
OF SEPTEMBER ANNO
DOMINI 1708
HENRY STROTHER OF BILTON
BANKS GENT. INTERED THE
17TH DAY OF JULY 1718.

HERE LYETH THE BODY
OF MICHAELL COULTER
WHO DEPARTED THIS
LIFE THE 23 OF
FEB IN THE YEAR OF
OUR LORD 1722
AND IN THE 76TH
YEAR HIS
AGE

HERE LYETH UNDERNEATH
THE BODY OF
ROBERT CARR GENT
WHO DEPARTED THIS
LIFE THE 26TH DAY OF
JULY 1726 AND
MARGT HIS WIFE
WHO DEPARTED THIS
LIFE THE 16TH DAY OF
17
AGED

HERE LYETH THE BODY OF THOMAS
ARMORER OF LESBURY WHO
DEPARTED THIS LIFE APRIL 21
DAY ANNO DOM. 1741. AGED 80.

There are other monuments to Brown of Alndyke, the Garretts of Wooden, to Roseden of Bilton Barns, to the Carrs of Hipsburn, and to the Marchs of Field House.

[An instance of longevity is recorded in 1756, December 31 : —“Died at Lesbury, Mary Bennet, aged 110, who (except her sight, which she lost about three years before) enjoyed all her faculties to the last.”*]

[Mr Tate notes the following remarkable names of places in Lesbury township or parish :—Gozell Hill, Swelly Hill, Shell Laws, Edin Hill ; Wildhope Hall, $\frac{1}{3}$ mile north of Bilton ; Hungerup farm, Lesbury.]

HAWKHILL.†

Hawkhill township is in the north part of the parish of Lesbury, and has an area of 736a. 0r. 14p.; viz., land, 709.565 acres, public roads, 12.965 acres, railway, 2.933 acres, and water 10.624 acres.

Richard de Haukehill held it of William de Vesey by one fee of ancient feoffment, that is before 1135,‡ and in 1289 Nicholas de Haukille held it by one fee, and an yearly payment of 13s 4d, the estate being then worth £12 yearly ; he, at unknown date, granted a rent out of Hawkhill to Brinkburn Priory.|| John de Burghdon in 1314 held it, being then worth £16 yearly by one fee and the payment yearly of 13s 4d for castle ward;§ and in 1346, Alicia Burghdon held the vills Hauchill and Heworth (Ewart) of Henry de Percy, by homage and fealty, by service of one fee and one third, and payment for Castle Ward 17s 9½d ; they were worth £20 yearly.¶ From an inquisition made in 1368 we find that both Hawkhill and Ewart were in possession of Thomas de Gray, on the same conditions as those by which they were held by Burghdon ; as early as 1345 Thomas de Gray had a free warren in Hawkhill, and ever since that time Hawkhill has belonged to the family of Grey, and is now the property of Earl Grey. In the Court Leet,

* Table Book, ii., p. 69.

[† This is written variously, Hawkyll, Haukille, Haukhill, Hauckille, Hauchill, Haukehall, Haukle, Awkehyl, &c.]

[‡ Testa de Neville — Michael Hawkille witnesses a charter of Eustace de Vesey to Alnwick Abbey ; Richard de Hawkill witnesses one of William de Vesey ; Nicholas de Hawkill witnesses one of William de Vesey, son of Eustace ; and also of John de Vesey.]

|| Arch. Æliana.

[§ See Hartshorne's Feud. and Mil. Antiq. Northd. vol. ii, App. p. cxxiii.]

¶ Ibid. p. cxxix.

1655, William Brown, of Haukle, gent., is mentioned. In 1656, Wm. Brown complains against Patrick Maclewyman, clerk, who is amerced 3s 2d. In 1704, the Earl of Derwentwater was a free tenant in Hawkle. In 1663, Lord Grey was rated at the value of £100 for Hawkhill.

In the royal survey made by Hall and Humberston in 1569, we have the following entry:—"Sir Thomas Grey holds the vill of Hakeley (Hawkhill) with all lands, tenements, feedings, pastures, rents, tenements, and other appurtenances, freely, by service of one fee, suit of court at Alnwick, paying yearly for castle ward 13s 4d, and for cornage 1s 4d." The inhabitants of the vill were liable to the payment of 20d yearly to the barony of Alnwick, from immemorial usage. One very singular feudal imposition is still continued, called *Manor Barley*, amounting to nearly 27 new bolls of barley paid to Longhoughton mill.

Hawkhill farm was tenanted from 1832 by Thomas Chrisp one of an ancient and distinguished family of farmers. He was a very successful breeder of short horns. His short-horned bull carried off the prize at the Paris Universal Exhibition, in June, 1855. So much appreciated was his obtaining this honour for Northumberland, as well as for his services to the public; and so much was he respected for his honourable, kind, and genial character, that a public testimonial of plate was presented to him, from farmers and others, at a public dinner given to him in Alnwick, on December 29th, 1855.* He died in 1868.

[Since Mr Tate wrote, Hawkhill farm has become the property of the Duke of Northumberland, having been exchanged by Earl Grey for lands at Longhoughton, adjoining Howick.†]

An instance of longevity is recorded at Hawkhill, on Feb. 12, 1819, when David Watson died, aged 102.‡ "Hakell brigge" is mentioned in 1620.||

WOODEN.

Wooden, which is a small township or hamlet in the south part of the parish of Lesbury, contains 276a. 34p., viz.—land, 270·650a., public roads, 2·018a., railway, 3·435a., and water, ·110a.

* See Latimer's Historical Register, p. 373.

[† Information from Mr R. G. Bolam.]

‡ Table Book, iii., p. 194.

|| History of Alnwick, ii., p. 259.

The old name was *Walden*, from the Anglo-Saxon *Weald*, woodland, of which the present name is a corruption. Richard de Emeldon, who died in 1333, besides other possessions, held land in Walden which passed to John de Strivelyn, who had married Jane, his third daughter.* Through other marriages, Strivelyn was connected with the families of Middleton and Swinhoe; and, when he died, many of his possessions "including one tenement and the third part of a tenement and forty acres of land and meadow in Wolden (Wooden) on socage tenure," became, through a settlement, the property of John Middleton and his wife Christiana; and these estates were in the possession of Christiana in 1421.

The family of Thompson held Wooden for more than half-a-century. According to the court rolls the heirs of John Thompson had lands in Wooden in 1656; Mr. Henry Thompson is in 1663 rated for it at the value of £60; in 1693, the heirs of John Thompson and William Brown, Esq., were owners of Wooden; and in 1704 it was held by Thomas Thompson and William Browne, Esq. Ralph Lazenby of Hexham, voted for it at the election of members for the county, in 1722; and John Gill, living in Edinburgh, voted for it in 1774.

[At the Alnwick Sessions of 1682, "Mrs. Margaret Bell and her son Mr. Samuel Bell, of Wooden, were presented to be dissenters.—soe reputed."†]

BILTON.

Bilton vill or township, on the south-west part of Lesbury parish, has an area of 138a. 25 perches; viz.—land, 1337·641a., public roads, 16·250a., railway, 22·685a., water, 5·576a.

It was held in the thirteenth century on military tenure, from William de Vescy, by Herveus de Bilton, by service of one fee of ancient feoffment, (that is before the day of the death of Henry I., A.D. 1135). It was held in 1289, by Henry de Bilton,‡ by service of one fee and an yearly rent 13s. 4d., being then worth £13 yearly; and in 1346, by

[* By an Inquisition of 1364, Christiana, wife of Sir William de Plumpton, but first married to Richard de Emeldon, had held besides many other places, "Woldon, Alnemouth, Lathebury." Hodgson, vol. i, pt. iii, p. 82.]

† Hist. of Alnwick, ii, p. 160.

[‡ William de Bilton, along with Michael Haukhille, signs a charter of Eustace de Vescy, to Alnwick Abbey.—Hist. of Alnwick, vol. i., Appendix, p. x.]

Alianor, widow of Richard de Bilton, being then worth twenty marks.† After this another family appears as owner; for in 1358, William, the son of Henry de Bilton granted to Robert de Umfraville, senior, knight, the reversion of the manor and vill of Bylton, which John de Belyng-ham held during the life of Alianor; and accordingly we find Robert de Umfraville in possession of the vill and manor in 1368.‡

The old owners had at Bilton their pele tower, or fortified house, some portions of which were standing on the north side of the old road at the east end of the village. Under the protection of this tower were grouped the cottages in which lived the copyholders who tilled their own lands in the township. Of these small proprietors there were seventeen in 1569, all, excepting two, having a messuage and a husbandland, (about 30 acres of cultivated land), with rights over Bilton common, and paying quit rents to the lord of the manor, ranging from 8s. to 21s. 4d. yearly; two of them were smaller holdings with only a selion of land attached to the cottage, the quit rents being each 3d. and 2s. The following are the names and amount of quit rent of the ancient yeomanry of Bilton in 1586.

Edward Alnewick	13s 4d.	Thomas Anderson	21s 4d.
Robert May	13s 4d.	Edward Shepperd	18s 6d.
Thomas Sheppearde	21s 4d.	Edward Slegge	40s.
John Hephell	15s 4d.	Thomas Daund	18s.
John Blith	19s.	Edward Alnewick	11s.
Edward Alnwick	21s 4d.	Thomas Dobson	3d.
John Forster	18s 6d.	John Taylor	8s.
Thomas Patterson	19s 4d.	William Grey	2s.
John Stampe	13s 4d.		

Henry Gallon then held a tenement by indenture for 21 years at a quit rent of 21s. 4d. Coal was worked in the township not only for home consumption, but for export; William Grey had a lease from the lord of the manor in 1569, for 60 years, at a rent of £4 14s.—of the mines and coal pits in the fields of Bilton, within the closes and beyond, with free passage to Aylemouth.

Some feudal charges were made upon the inhabitants of Bilton; they paid yearly 13s. 4d. for castle ward and 16d. for cornage, and to the bailiff of Lesbury as due to the lord by prescription, in respect of their ploughs, 7s. 10d., which

[† Hartshorne, vol. ii., App. p cxxix.]

‡ *Archæolog. Æliana*, n.s., vol. i.

was called *carrying Silver*. They were bound too to carry coals to Alnwick Castle; for we find eight of the inhabitants amerced 3s. 4d. each for withdrawing this service.

A common belonged to the vill of Bilton, to which reference is made in the court rolls of 1601; when the tenants of Wowden and Buston were charged that "they do pretend title to a parcel of land in the common of Bilton wrongfully." All the copyholders have been swept away, and the common has been enclosed. After this period there are very few references to proprietors in Bilton; William Cooper of New-castle voted at the election of members for the county, in 1734, for his property in Bilton. The family of Strother held land there for a few generations; Arthur Strother was rated in 1663 for part of Bilton; he died on Sept. 26th 1708, and was buried in Lesbury church. Henry Strother of Bilton Banks, gent., died in 1718, and left land called Pine Hall to Lesbury School; and the last record I have seen connected with Bilton, is that of his marriage,—“1734, Oct., Mr. Henry Strother of Bilton Banks, married to Mrs. Francis Carr of Lesbury.” All the land of Bilton now belongs to the Duke of Northumberland.

At Bilton somewhat more than a century ago, women were first employed in this district to hoe turnips. Oats were then sown three years in succession on the same ground, which, however, was ploughed deeply with four oxen, the yield being about ten bolls per acre; and on the fourth year turnips were sown broadcast, and the plants were singled by the Alnwick gardeners, at a contract price; but in one favourable year the crop of turnips was so large on Mr. Thompson's farm, that the gardeners would not undertake the work at the usual price; and he therefore employed women from the village at four pence per day, to single the plants; and afterwards women were generally employed at this work.*

In this township there are five farms from 40 acres to 553½ acres in extent, let on an average at about 16s. per acre. In the village there are a farm house and nine cottages; to four of these from 3 acres to 4½ acres are attached, and to the others, half an acre or less. The Railway Station is near to the village.

On the east of the Dene were the Bilton pits.—A fault runs up the Dene and cuts off the coal. Good coal is supposed to be at Bilton Banks.

* Information of Mr. Thompson of Broxfield, 1866.

Ornithological Notes. By ROBERT GRAY, F.R.S.E.

PEREGRINE FALCON.—(*Falco peregrinus*.) During the winter months the Peregrine Falcon is still met with occasionally in Berwickshire and the Lothians. It formerly had its eyrie on the cliffs at Fast Castle and St. Abb's Head. I have driven the birds from their nests in both localities. I still regard Fast Castle as a breeding place, though it is possible that the other eyrie has been deserted since the lighthouse was erected. Two beautiful Peregrines were shot near North Berwick, in December, 1875. They were male and female, and were supposed to have been reared on the Bass Rock. I have been indebted to Mr Small, of this city, for an opportunity of seeing the birds.

ROUGH-LEGGED BUZZARD.—(*Buteo lagopus*.) Unusual numbers of this bird have occurred in the eastern counties of Scotland during the present winter. I have a record of upwards of thirty specimens taken in various Scotch localities in the months of November and December last. The Buzzards reached our coasts during the severe north-easterly gales which prevailed in the end of October and the early part of November, and appear to have been first seen in Forfarshire, whence they spread rapidly southwards. Two, a male and a female, were shot near Selkirk, on 26th October; one, a male, at Coldingham about the same time; a fourth, a female, was trapped near Haddington, on 6th November, and on the 28th of that month other two occurred in Selkirkshire. Later still, two, both males, were shot in the neighbourhood of Kelso. All these birds I had an opportunity of examining, besides many more taken in the counties of Fife, Mid Lothian, Roxburgh, and Dumfries. It is a noteworthy fact in connection with the late invasion that the flight of the Buzzards was diverted westwards by the trending of the Tay and Forth; in the one case the birds were found in greater numbers in the neighbourhood of Dundee and the Carse of Gowrie, where thirteen were trapped or shot; while in the other they would appear to have gathered in some numbers in the county of Stirling—ten specimens having been taken on one estate alone. Those which came south of the Forth, were, for the most part, found to the east of Edinburgh, Peebles, and Dumfries—only three having been, so far as I am aware, obtained in Kirkcudbright and Wigtownshires. These Buzzards—undoubtedly of Scandinavian origin—were all in excellent plumage, some of them indeed being almost perfect.

SHORT-EARED OWL.—(*Otus brachyotus*.) Has occurred in great numbers in Berwickshire and the Lothians within the last three months. I examined twenty-seven specimens which had been sent to Edinburgh almost entirely from these counties, for pre-

servation, before the end of October. Like the Rough-legged Buzzard, these Owls were in beautiful plumage, and many of them no doubt, arrived from other shores in their company.

WHITE WAGTAIL.—(*Motacilla alba*.) I observed two specimens of the White Wagtail flying about some heaps of manure in a field near Burntisland, in Fifeshire, on 2nd October, 1875, and I record the circumstance here in the belief that if regularly looked for in East Lothian and Berwickshire it will yet be found in small numbers in both counties. It appears to be livelier in its movements than the Field Wagtail, to which it is very closely allied. Of late years it has been found to be rather a common bird in the Orkney Islands; and my friend, Capt. Feilden, observed it frequently in the Faroe Islands. From one of my note books, I find that I saw one of these birds near Strachur, on the banks of Loch Fyne, on 14th September, 1873.

HOODED CROW.—(*Corvus cornix*.) This bird is strictly a winter visitant in East Lothian and Berwickshire, where it chiefly frequents the sea-coast in small flocks for the purpose of feeding on what the tide throws upon the beach. During the severe frost of December, 1874, immense numbers of starlings, pipits, snow-buntings, redwings, and fieldfares succumbed to the weather, and at various places along shore, from Berwick to Aberlady, were seen dropping into the water through sheer exhaustion. These became the prey of the Hooded Crows, numbers of which were hovering in the vicinity on the look-out for the perishing birds. At low water, in such localities as Aberlady Bay and the Tyne estuary, the sands bore ample evidence of the slaughter carried on by these Crows—quantities of feathers and half-devoured bodies being strewn upon the beach.

ROLLER.—(*Coracias garrula*.) It may not be out of place here to state that a young male Roller was shot at Dalhousie, near Lasswade, within ten miles of Edinburgh, by Mr Dickson, game-keeper, on 14th October, 1874.

TURTLE DOVE.—(*Columba turtur*.) One flew on board a ship when opposite Dunbar, in June, 1872.

RED-LEGGED PARTRIDGE.—(*Perdix rufa*.) Mr Scot-Skirving informs me that Mr Hope, of Luffness, has introduced this beautiful bird into East Lothian, and that it is now abundant—large coveys being in the habit of frequenting Gullane Hill.

PURPLE HERON.—(*Ardea purpurea*.) An immature female bird of this species was shot near Dalkeith, on 21st October, 1872. As the Purple Heron is a bird of extreme rarity in Scotland, I may be allowed this opportunity of mentioning that five days previously, namely, on the 16th October, one, also in immature plumage, was shot on the old links at Aberdeen, and is now in the College Museum of that city. I am indebted to Mr George Sim for a note of the occurrence.

GREEN SANDPIPER.—(*Totanus ochropus*.) Since my last communication, I have learned that the Green Sandpiper is a frequent, if not a regular, visitant to Mid Lothian. One, which I have examined, was shot by Col. Gillon, on the margin of Linlithgow Loch, in the end of September, 1875, and another was seen in its company.

RUFF.—(*Machetes pugnax*.) Is found in small flocks on the shores of the Frith of Forth, but is met with in greater numbers in the estuary further inland than Queensferry, as many as a dozen in a flock being observed on the mud banks near Grange-mouth, where my friend, Mr Harvie Browne, on a recent occasion, shot five birds out of a single flock.

BEAN GOOSE.—(*Anser segetum*.) This bird seems to have been very scarce during the winter of 1874-75;—the Pink-footed Goose having apparently taken its place. Unusual numbers of the latter bird have been seen and killed in Berwickshire and East Lothian; and even in Stirlingshire where it has hitherto been a comparative stranger.

COMMON SHELLDRAKE.—(*Tadorna Vulpanser*.) Eight or ten pairs of this beautiful bird still breed annually on Inch Mickery. They were seen there on 4th June, 1875. Shelldrakes are still common on the shell banks on the estuary of the Forth, near Grange-mouth, where at full tide they come quite near the beach.

TUFTED DUCK.—(*Fuligula cristata*.) The Tufted Duck will, in all likelihood, be found breeding in Berwickshire and the adjoining counties, if carefully looked for. In May, 1875, a nest with ten eggs was found on a small island in a lake in Fifeshire. The eggs were taken and placed under a barn-door fowl; they were all hatched, and five of the birds grew up—one, a female, being still alive, and in the possession of Mr A. B. Herbert, of Trinity Lodge, who exhibited the bird at a meeting of the Royal Physical Society, Edinburgh.

GOOSANDER.—(*Mergus Merganser*.) This handsome bird has been very plentiful in Berwickshire and the Lothians during the present season. Eleven specimens—seven males and four females—were sent to Mr Small, for preservation, in the last week of January, 1876. Two were shot, and another seen, at Broxmouth, near Dunbar, in December last, and another was killed at North Berwick, in the same month. The Goosander is now known to breed regularly in Perthshire.

EARED GREBE.—(*Podiceps auritus*.) Although perhaps the rarest of the British Grebes, this species seems to occur regularly every winter, in suitable localities, along shore between Berwick and Belhaven sands. It is also found higher up the Firth. I lately examined two specimens that were shot in the Forth, in December, 1874. I have never met with Eared Grebes in the breeding plumage, on the east-coast.

BLACK GUILLEMOT.—(*Uria grylle*.) Although much less plentiful in the east of Scotland than in the west, this Guillemot is still regularly met with off shore from Tantallon to the Tweed. I examined one in the flesh, which was shot near Tantallon Castle, in the first week of December, 1875. The Black Guillemot, however, keeps well out to sea, seldom venturing near the shore, as the Common Guillemot is known to do, in some localities.

BLACK TERN.—(*Sterna fissipes*.) The Black Tern being a rare bird in Scotland, I may mention that in addition to the specimen shot by Mr Harvie Brown, on the banks of the Forth, in September, 1870, and referred to in "The Birds of the West of Scotland," another passed up the Firth in September, last year, and was shot at Dunmore.

BLACK-HEADED GULL.—(*Larus ridibundus*.) About the middle of November, 1875, I examined several specimens of this Gull which had leaden grey heads; these had been shot, a few days previously, on the shore between Musselburgh and Portobello, and being interested in their appearance, I visited the coast, where I saw others flying about in the same state of plumage. I am satisfied that all these birds were of this species, but I do not recollect having before seen any approach to a change in the head colouration during the winter time. A pure albino Black-headed Gull was shot two years ago, near Cockburnspath, by Mr Melvin; who mentioned the circumstance to me a few weeks ago. Mr Small, who preserved the specimen, has informed me that it was of a spotless white.

GREAT BLACK-BACKED GULL.—(*Larus marinus*.) I have seen this bird on two occasions off the Haddington and Berwick coasts, swimming on the water, on very calm days, beside a group of Mergansers, and watching these birds when diving for their prey. As soon as they came to the surface with the fish they had caught, they were immediately attacked by the Gulls, and forced to relinquish their hold. I observed one Gull in particular, rob three Mergansers within a very few minutes; each time, seizing the industrious fisher with its powerful bill, to oblige it to quit its prey.

ICELAND GULL.—(*Larus Icelandicus*.) An immature female Gull of this species was shot between Leith and Portobello, on 1st March, 1875. I am inclined to regard the Iceland Gull as a yearly visitant to the Forth in small numbers.

HERRING GULL.—(*Larus argentatus*.) I have repeatedly observed that on the Berwickshire coasts, and elsewhere, Herring Gulls, especially young birds, feed, to a great extent, upon starfishes. One which I shot on the 11th September, vomited, when it fell, ten specimens of *Asterias rubens*, two of which measured nearly three inches across the rays. It is worth noting that in every case the Gulls happened to be in moult.

COMMON SKUA.—(*Lestris cataractes*.) Sometime in February,

1875, a Common Skua was shot on the farm of Harden Mains, in the parish of Oxnam, Roxburghshire, while pouncing on a tame duck which was swimming in the mill pond. It had already killed the duck, and was in the act of tearing out and devouring the bird's entrails, when fired at. Harden Mains being at least thirty miles out of its legitimate reckoning, the Skua was, no doubt, hard pressed by hunger, when it took such an unusual mode of satisfying it.

STORM PETREL.—(*Thalassidroma pelagica*.) Three or four specimens of this Petrel were seen frequenting the Frith of Forth, during the storm which prevailed about the middle of October, 1875. Two, which were shot, came under my notice at the time.

ROBERT GRAY.

13, *Inverleith Row*, *Edinburgh*, 10th February, 1876.

A Glimpse of the Olden Times.—KAIN FOWLS.
Communicated by THOMAS CRAIG, Kelso.

Isolated local incidents are often pregnant with interest as throwing light on the customs of the olden times, the relations of the different classes of society, the changes wrought in the course of years, and the social influences that were at work in everyday life; and it is curious to contrast little and apparently trivial circumstances of the past generations, with present feelings and practices. The relations of the farmer with the agricultural labourer have of late years been the subject of keen and general discussion, and not a little has been written upon the subject in the Border district, from the standpoint both of the farmer and the worker. Much of the discussion hinged upon the advantages or propriety of the "hinds" being partially paid in kind and allowed to keep a cow. A generation or two ago it was not uncommon in certain parts of the district, for farm servants, both "hinds" and "cotters," to be allowed to keep poultry to a certain extent. The following extract has reference to that custom so far back as 180 years ago. It is copied from a manuscript book containing memoranda made by the farmer of Elliston, in the parish of St. Boswell's,

Roxburghshire. The entries,—which are remarkably accurate in spelling, considering the laxity which existed regarding uniformity on that point, even in printed books and documents, at that period, and beautiful specimens of penmanship—are, to persons unaccustomed to the perusal of ancient manuscripts, somewhat difficult to decipher, on account of the closeness of the writing and the change in the formation of some of the characters. The master seems to have been kindly considerate and indulgent to his servants, from the arrears of payment he suffered to run up; and, on the other hand, the servants seem to have been trustworthy and honest-grained people, of whom there was little ground to suspect that they would quit the service with a debt unpaid. The last item appears to have been an undated post entry shewing the almost entire payment of rather heavy arrears. Here is the record:—

“Ane Account of the Kaine of Elliston.
November 27 day 1695.

“From Bessy Swwanston, 18.

“From William Newbikin, 12 and a half.

“From James Newbkin, 10 and a half.

“Bessy Swanston has paid all her kain.

“William Newbikin has paid all but one chicken.

“James Newbikin has paid all but two hens.

“John Bamer has paid 12, and 6 owing.

“James Lamb has paid 8, and 4 resting.

“John Falla has paid all this year but one chicken, but owing
3 of the 94 year's kain.

“John Bamer is owing 24 fowls for byepast time.

“John Bamer is owing 2 fowls.”

The custom is now altogether obsolete in Roxburghshire, if it even lingers anywhere. It was at best an irksome obligation; and more of these remnants of serfism have been abolished since the advent of railways and cheapened literature, than for generations previously. But it survived in the Kale-water district till twenty years ago. On the farm of Crookhouse, in the parish of Linton, when tenanted by the late Mr. John Purves, whose lease terminated in 1855, the “hinds” were required to furnish to their master six cock chickens, and the “cotters” four cock chickens yearly; while the tenant in his turn, at least during the earlier portion of his lease, had to furnish a certain proportion to the “laird.” On the adjoining farm of Linton, tenanted since

1799 by the family of Bell, where the custom prevailed until the estate of Clifton came into the possession of the late Mr. Pringle of Clifton and The Haining, the tenant was bound by the terms of the lease to provide the landlord with "two dozen kain hens, or twenty-four chickens," or in the option of the proprietor to pay one shilling for each undelivered hen.*

A little episode in connection with this custom of paying kain may be given, as shewing how little circumstances branch out, and cause grief or gratification in little communities. It chanced that on the farm of Crookhouse—where the farmer's household was usually humane and considerate—one year one of the kain fowls took unkindly to his new quarters, and repeatedly returned to the house of his "ain folk," to be duly returned to his new and rightful owners. It was seen meet at the farm house, however, to put a stop to this practice, which was done by his being sent in a cooked state to the house of one of the "hinds" for the benefit of a sick inmate. The original owner was a widowed "cotter," and the worthy but poor woman laid it deeply to heart, that those in far less straightened circumstances than herself, should be enabled to feast off her carefully-reared fowl, which had been regarded as a minor member of her little family. It was not that she envied her neighbours on account of a kindness shewn to them; but the *manner* in which it was done, touched the tender feelings of her nature. It is from tracing such incidents as this, that a true and unexaggerated idea is obtained of the delicate perceptions and finer feelings of the humble peasantry of Scotland, on which poets and preachers, orators and historians, have so often expatiated.

* In the same lease it is stipulated that the tenant should deliver yearly at the landlord's residence, four "sufficient double cart loads of coals," each containing twelve bolls, the proprietor paying the expense of loosing at the pit, five shillings being payable for each undelivered load of coals.

On *Motella tricirrata* a Fish new to the Berwickshire Coast.

The Fish, to which I beg to call the attention of the Club, is the "three-bearded Rockling or Cod;" or "Spotted Whistle Fish" of Pennant; of which an example was obtained on the 8th April, 1875, by one of the Cove fishermen, in a crab creel, on the coast between Siccar Point and Redheugh. He took it to Sir James Hall of Dunglass; who sent it to me for examination. Sir James has it now in preservation. None of the fishermen had previously seen a fish of the kind, and on inquiry at Coldingham I find it is not known there either. It is a small fish, about 15 inches long in this instance, and about the breadth of one's three fingers, and nearly of the same thickness throughout, compressed behind. It is of a yellowish red colour; and the scales are small, and the skin slimy. There is a deep groove behind the neck, in which the first dorsal fin, which consists of a few rudimentary rays, is nearly concealed; the second dorsal occupies the rest of the back ridge close up to the tail, and the anal fin looks like a repetition of the 2nd dorsal. The two pectoral fins are narrowly bordered with red, like the fins of a common trout. The body along the sides is spotted with grey. On the nose are two red barbules, and there is another at the symphysis of the lower jaw. The teeth are numerous and minute; adapted to crush the crabs and shell-fish, which form its food. Its near ally, the "five-bearded Rockling," (*M. mustela*,) is a reddish brown fish, not uncommon in pools between tide-marks. By some (Willugby, Gmelin, and Couch,) it is considered a variety of the common species. Fleming, probably copying Montagu, says it is common. The Rev. L. Jenyns (now Blomefield) gives an excellent description, and more correctly states "Frequents rocky shores, but is far more rare in British seas than *M. mustela*." According to Mr. Couch, it is common on the Cornish coast; the Rev. Dr. Gordon appears to have observed it only once on the shores of the Moray Frith, at Gamrie. At all events it is a good acquisition to us, not being recorded on any previous occasion.

JAMES HARDY.

Memoir of Mr. Alexander Jeffrey, F.S.A. Scot., the Historian of Roxburghshire. By GEORGE HILSON, Solicitor, Jedburgh.

Mr. Jeffrey's father was Alexander Jeffrey, a worthy well to do man; who long held the responsible situation of farm steward, near Dunse. He was a native of that town and married early in life his townswoman, Janet Smeaton. They were people of exemplary character, and ever held the esteem of their neighbours. After their marriage they lived for a number of years in the Dunse district, but afterwards removed to Roxburghshire, in various parts of which they lived, but latterly, chiefly in the Lilliesleaf district. Their family consisted of eight children, of whom Mr. Jeffrey was the fourth. He was born, it is believed, in the year 1806, in a house that stands on the roadside near Bewlie. Like children of people in his father's rank of life, the opportunities of getting education were limited, and what was got was often poor in kind. The first schools he attended were those of Maxwellheugh and Morebattle, in the neighbourhood of which his father was then employed. The school he last attended was Lilliesleaf. From an early age he was a great reader, devouring every kind of book he could lay hands on, and in after life he used to state, that all the education he got was acquired in this way. He was early put to work, and being a vigorous active fellow, he was soon able to earn a wage, and thus help his father. He worked as a miller at Lilliesleaf Mill, and when he was fourteen years of age, he was considered what was then called a full miller. While living in Lilliesleaf district, his father, who was a genuine Antiburgher, or extreme Seceder, with the family attended the meeting house of that denomination at Midlem, the minister of which was the Rev. Jas. Inglis. As is well known, they were a peculiarly strict body in their religious doctrines, and required an exemplary observance of the duties of life from all their members. From his intelligence and love of reading, he attracted the notice of Mr. Inglis, who, it is said, gave him great attention, and he thus acquired additional means of gratifying his taste for reading. He is said to have given offence to his father, and some of the stricter members of the body, by its becoming known that he read Burns' poems and Shakspeare. Being a good writer, and having a power

of ready expression, he was often employed in conducting the correspondence of his less scholarly neighbours, especially in love affairs, and it has been said that some rather ludicrous pranks he had played off in these matters, made a great deal of parish noise. His mental activity, however, unfitted him for the monotonous duties of manual labour in a country district, and he felt a great desire to get into a town. Various plans were proposed, but not carried out, and for some time, though regularly working, he was somewhat unsettled as to what to turn his hand to.

About the year 1825, he entered the office of the late Mr James Curle, solicitor, Melrose, where he remained upwards of a year, after which he removed to Edinburgh, where he obtained employment in the office of Mr George Scott, S.S.C., with whom he served for some years. At that time, Jeffrey, Moncreiff, Cockburn, John Hope, the McNeils, Jamieson, and Fullerton were at the zenith of their fame as advocates; and as Mr Scott's assistant, in the Parliament House branch of his business, he had many opportunities of hearing them speak. He seems to have been fired with enthusiasm for the law ever after. The impression he then received of the glory of being an advocate, appears never to have been effaced from his recollection, for down to his latest days it was his delight to recite to his acquaintances, the splendid appearances it had been his privilege to witness these distinguished men make.

In November, 1829, he applied to be admitted a practitioner before the Sheriff Court of Roxburghshire, but he was then unsuccessful, as he was in several subsequent applications. The agitation in connection with Reform in Parliamentary representation had commenced about that time, and he threw himself into it with great ardour on the popular side. He made many speeches in Jedburgh and the neighbouring towns and villages, and wrote much in newspapers in support of the bill. The views he expressed being somewhat extreme, and his proceedings marked occasionally with indiscretion, he never obtained the support or the countenance of the leaders of the Reformers, as the Liberal party was then called. This strongly provoked his ire, and when he could do anything to thwart or annoy them, he never missed an opportunity. His conduct on these occasions was marked—to say it gently—with great indiscretion and imprudence. He was a ready writer, and as he

was clever in making up a report of a meeting, he got a good deal of employment in this way. There being a great demand for reporters, owing to the numerous meetings that were then held, he was induced to enter the service of the proprietors of the *Kelso Mail*, the local Conservative organ. This was held as a desertion of principle, and was never forgotten or forgiven by the Reformers. In this capacity, he attended all the public meetings that were held in the counties of Roxburgh, Berwick, and Selkirk, during the election contests of 1832 and 1834; and the Courts then held by the Sheriffs, for the registration of voters. In this way he came much in contact with the leading men of the Conservative party, by whom he was much liked, as he was a good story-teller, and had a great store of miscellaneous knowledge. In later years, with congenial friends, and when he was in the tift, many an amusing story he told, of what he had seen and heard on these occasions. Jedburgh, about that time became his chief quarters, and having still a hankering after the law, he applied and was admitted a practitioner before the Burgh Court of Jedburgh, where there was then considerable practice. The late Mr Samuel Wood, then town clerk of Jedburgh, had a great liking for him, and he employed him as managing clerk in his office. Through Mr Wood's strong personal influence, the opposition that had existed and been so unworthily kept up, to his being admitted a practitioner before the Sheriff Court of Roxburghshire, was at last overcome in 1838. He then devoted himself with great assiduity to the practice of his profession, taking up every sort of case that offered him practice and knowledge of law. He worked up his cases with care and perseverance, and generally with a great amount of success. Through the influence of Mr Wood, he was appointed in 1840, political agent for the Conservative party in the town of Jedburgh. The duties he discharged with great zeal and activity, but about 20 years ago, he retired altogether from this branch of his business.

The case that decidedly established his position as a practitioner of ability, was the celebrated one relating to the thirlage of the Jedburgh Town Mills. It excited great local attention, and its progress was watched with great interest, as the exaction was held to be oppressive and injurious to the interests of the community. The magistrates and council—as proprietors of the mills for far above a hundred years—

had exercised certain rights of thirlage over the bakers and community. The title to do so had never been directly questioned, but the bakers always had tried to evade them, by private dealings with the tacksmen of the magistrates' rights. About 1839, disputes had arisen, and it became necessary in their opinion to assert the town's rights to the full extent. Various attempts at a compromise were made, but these having failed, the magistrates, in the full flush of anticipated victory, raised an action of declarator of their rights before the Court of Session, against the bakers, concluding that they and the whole inhabitants of the Burgh were bound to grind all the grain they brought into it at the mills, and pay the duties they claimed. The action, under the advice of Mr Jeffrey, was strenuously resisted by the bakers. By his investigation into the antiquities of the Burgh for his historical purposes, and from the knowledge of the town's affairs he had acquired while in the town clerk's office, he was well qualified for his position as legal adviser of the defenders, as the case involved many historical references both as to the title and actings of the magistrates and their tacksmen. The defence was that the magistrates had no title, and any alleged recognition of it in practice had neither been uniform nor consistent with the right claimed: The litigation was protracted over several years, and at last was closed by a jury trial in Edinburgh, on the 12th and 13th days of January, 1842, presided over by Lord Justice Clerk Hope, who directed the jury to find substantially in terms of the defence. This they did unanimously. The result, while a great triumph for Mr Jeffrey and his clients, was most disastrous to the Burgh, and ended in its bankruptcy, and the sale of all its property. The then Lord Advocate Macneil—afterwards Lord Colonsay—who was the senior counsel of the bakers, whom Mr. Jeffrey had often met at the numerous consultations that took place during the litigation, at the close of the trial expressed to him how much he and the other counsel had been indebted to him, for the clear way he had been able to present to them the title of the magistrates, and all the relative circumstances as to the possession.

After this, his business increased rapidly, but his liking lay more to the criminal than to the civil department of his profession. He was the popular advocate in almost all the criminal cases that arose in the counties of Roxburgh and

Selkirk, before the courts of which he made many and successful appearances, shewing great acuteness and knowledge of the principles and practice of the law. In early life he had had a severe bronchial affection, which he never got the better of, and in public speaking there was a shrill feebleness in his voice, which was rather unpleasant, and somewhat marred the effect of his addresses. The courts of the Justices of the Peace in all the different districts of these counties, he regularly attended, and had nearly all the practice. His acuteness, the great knowledge he displayed, the courteous but firm and independent way he conducted his cases, made him generally liked by the country gentlemen, who uniformly treated him with great respect and attention, and often gratifying compliments were paid him. The late Lord Campbell, when residing at his seat at Hart-rigge in the autumn, one day surprised Mr Sheriff Craigie, by stepping into the Sheriff Court at Jedburgh, while engaged in trying a case in which Mr. Jeffrey was acting as agent for the prisoner, and took his seat on the bench. Mr. Craigie having shewed his lordship the charge, he sat and heard the case tried with that great gravity which so much distinguished him. Mr. Jeffrey was not successful in his defence, but his lordship at the close told Mr. Craigie, that it was as well pleaded as if it had been done in Westminster Hall. With that kindness of heart which so much distinguished Mr. Craigie, after leaving his lordship he called at Mr. Jeffrey's house, and communicated the gratifying remarks, which, as may be supposed, were very pleasing to him. Mention has been made of his knowledge of law, and his undoubted dexterous ability in applying it in practice, but unfortunately the impulsiveness of his temperament, and the want of exact mental training in his early years, often made him hasty in arriving at conclusions, which ultimately were not borne out, and in this way he occasionally found himself in a false position, from which he had difficulty in receding. He was generally liked by his brethren—as he was fond of calling them—in the profession, and was ready at all times to give information and advice; for which his varied experience well qualified him. He was not always at peace however with them, and he could and did make many violent outbursts against those who inadvertently might have wounded his susceptibilities. These soon passed away, and he bitterly regretted any severe remarks that he had made against his supposed offender.

Mr. Jeffrey's name in future will be chiefly remembered as the author of the "History and Antiquities of Roxburghshire and adjoining Districts." For a work of this kind, he had the necessary knowledge of the district—equalled by none—and great enthusiasm for his subject. In 1836 he had published a local work, consisting of an octavo volume of 420 pages, now rarely to be met with. The original design of it was a history of Jedburgh; but having in his investigations acquired much county information, he aimed at the more ambitious design of making a county history. It bears on every page the marks of haste; the descriptions are feeble and faulty; the theories are fanciful and crude; and it is disfigured by many peculiarities of style, of which in later years he was painfully conscious, and which he disliked being referred to. The idea of re-writing this work on an enlarged scale, never was absent from his mind, and as in the course of his business, he had to travel much through the county, he never failed to avail himself of these opportunities to examine and take copious notes of what he knew to be interesting. In this way he had acquired a large mass of materials, which in 1853 he commenced to arrange with a view to publication. According to the prospectus then issued, it was to be published by subscription in two crown octavo volumes. The first was issued in March, 1855, when it was stated that the second would follow in the summer of that year, but it did not till November, 1857. In the preface it was announced that the author had found it impossible to condense his materials within the limits of two volumes, and do anything like justice to the subject, and that the work would therefore extend to a third volume, which he expected to be ready by the end of 1858. It did not however appear till 1859, and it also contained an announcement of another volume being necessary to absorb the valuable material he had on hand, which would be published in 1860. This was not done, however, till 1864. This protracted mode of publication was most unfortunate for the pecuniary success of the work, and was aggravated by each volume having a separate printer and publisher. When the work was first announced, without any great personal effort, he soon obtained a numerous subscription list, comprehending all classes of the community, and the earlier volumes were quickly disposed of through them, and the general public. Owing to the delay in publication, the

subscription list was much reduced by death and removals, and many withdrew, owing to its additional cost by its increased size. The result was, that the author was subjected to much pecuniary loss and annoyance. It is a matter of regret that before going to press, he had not had the work fully written out. By subjecting it to careful abbreviation in the less interesting parts, and throwing much of the chronological statements into an appendix, he would have improved the smoothness of the narrative, and been able at once to issue it in a handsome octavo volume, like Dr. William Chambers' *History of Peeblesshire*. There is little doubt if he had done this, the work would have been in every way, a great success. As it is, the demand for it still continues, and the parties who hold the remainder of the impression, have just now announced that the price of a set has been considerably raised. In many ways it is a wonderful book. That a man engaged in a laborious and exacting profession—as the author was all his life—could spare time, and maintain the zeal to promote so many enquiries over such a wide field—altogether apart from the labour of composition and passing the work through the press—shows he had a thorough love of his subject. Although in many cases his theories are fanciful and obviously erroneous, and several of the deductions he draws from events and circumstances are neither logical nor well stated, and the style often feeble and disfigured by peculiarities of expression, yet take it all in all, there are few books where there are so many interesting subjects so well treated, and generally with great accuracy. It may be thought he is wrong in some of his conclusions, but there is no appearance whatever of his stating the facts to suit a preconceived opinion. Village antiquaries, who, as is well known, are always singularly tenacious of their notions, and are ever on the alert to pounce upon any one who does not minutely describe their own little world, and adopt all the popular ideas existing among them, may complain that the narrative is defective; but for a history of this kind, all that is required is a general statement of the facts, and this is fairly done in most instances. Mr. Jeffrey had several critics of this kind, and was hardly treated because he had the courage to explode several antiquarian local delusions. We read the volumes as they appeared with care and attention, and since, many times have had occasion to refer to them, and notwithstanding the faults alluded to, we think it

a most interesting book, and one that may be relied on by persons out of the district.

Though unsuccessful in a pecuniary point of view, and the occasion of much annoyance and trouble, yet he had a great deal of pleasure intermingled with it. It gave him a status that could not be disputed. The local and provincial press, as the various volumes appeared, treated the work with great respect. As the writers were chiefly natives of the district, and thus had a local knowledge which enabled them to mark any trips he had made, it is remarkable that few or no faults are noticed by them. He also received letters from many distinguished men, for the way he had dealt with the subject, and he was greatly gratified by being unanimously admitted a member of the Society of Antiquaries of Scotland, on 30th November, 1859, in respect of his authorship of the work. But what gave him most delight, was the notice of it by the *Edinburgh Review*, in a special article in the number for October, 1860, (vol. 112, p. 489), when the three first volumes only had appeared. The writer deals fairly with the work, and gives it great praise. This quickened the sale of it among that class of readers who could appreciate it.

Mr. Jeffrey was all his life fond of appearing in print. He put forth many productions on passing events in which he was interested, but they did not attract much permanent notice. This arose from their being quickly got up, and generally displaying more feeling than argument, they were soon forgotten. The most of these he never liked to hear mentioned, and on this account they are here not further referred to. About the year 1835, he published a "Guide to the Antiquities of the Border," which has been long out of print; and which he meditated re-issuing, but never did. In 1843 he printed an address on the "Rise and Progress of Science," which he delivered to the Jedburgh Mechanics' Institute; and in 1852, another on "Local Antiquities." Both of these in some parts display deep research and eloquent writing. After the publication of the report of Mr. Bright's committee on the Game Laws in 1847, he delivered a lecture at Galashiels on this subject, subsequently printed, which contains a resumé of all the grievances now so popularly expatiated on. Few men were better qualified for depicting the operation of these laws than he was, from having had in the course of his business to defend so many of their transgressors.

In private life Mr. Jeffrey was a man of singularly retiring habits, and while no man was more gratified than he was by the attention and courtesy of his superiors in social life, he never resorted to any of those manœuvres, so common in daily life, to obtain them. He always felt that whatever share of these he had obtained—and it was not little—was the natural tribute to his abilities. He was a model of a domestic man. He had no sources of enjoyment beyond the bosom of his own family—to whom he was most ardently devoted—and for whom he made sacrifices which the world little knew of, to obtain their worldly advancement. With the daily newspaper or magazine at his own fire side, in the midst of his family, at the close of the labours of the day, no man could be happier. He was deeply read in the works of Scott, Hogg, Burns, Shakspeare, Dickens, and what may appear strange to those who had not much intercourse with him, his acquaintance with the Old Calvinistic and Protestant theology was considerable. He derived great enjoyment from such books as “*Boston’s Fourfold State*,” and the “*Marrow of Modern Divinity*.” He had an intense dislike to everything that inclined to modern innovations in public worship, and his Protestantism was fierce and rather bigoted. He was long associated with the Anti-Burgher Meeting-house in Jedburgh, but shortly before its dissolution, owing to some difference of opinion with its authorities, he withdrew to the Parish Kirk. He had great powers of conversation, and effectively could tell a good story. He delighted in cracks with congenial friends, and where a tumbler of toddy or a glass of wine intervened—but in which he seldom indulged—he was the best of company; stories local, literary and professional, flowing from him in a stream of great variety. Physically, he was a fine looking man. Of good height, of comfortable stoutness, with a good formed head, well set on his body, and with rather finely formed, expressive features, and with careful dressing—which he never neglected—he was rather a noticeable man in the highways of life. The photographs which were published by the Jedburgh booksellers, are excellent likenesses of him.

Owing to some peculiarity of character, of which he was not altogether unconscious, he could not fight successfully with fortune. Though opportunities in his professional career occurred, when, in the estimate of those who knew

him, he might successfully have advanced himself, yet through a backwardness of character, which he had to a large extent where he was personally concerned, or some other unapparent cause, he could not seize them, and failed to push himself on the notice of those who could, and willingly would have helped him to obtain some of the preferment which occasionally falls to country solicitors. The result was, that his life was an incessant struggle for the maintenance of himself and family, and it is somewhat sad to think, that with his many good points, in the later years of life his lot was that of a hard toiler. Had he been able to enjoy a little more ease and recreation, there is little doubt his life might have been prolonged. To his credit he never complained, and rather prided himself in declaring that whatever he had done in this world, was by his own abilities and industry. His latter years, as may be supposed, were rather anxious and painful ones to him. He had many sorrows and trials. The greatest was the loss of his wife, in May, 1872. Between them there was a never failing affection and respect. Her death he keenly felt, and it seemed to undermine his physical and intellectual powers. This unfitted him greatly for attending to business, and his later public professional appearances were often painful to those who had been accustomed to see him in his vigorous days. This continued rapidly to increase during the last year of his life, and on the 22nd day of October, 1874, while quietly sitting unengaged in the Sheriff Court at Jedburgh—where he had spent so much of his time—a slight affection of paralysis came over him, and though able with assistance to walk home, his well-known person never appeared again on the streets of Jedburgh. The disease soon overcame his already enfeebled mental and physical powers, and on Sunday, the 29th of November following, he peacefully died in the 68th year of his age, and on Wednesday the 2nd day of December, his remains were buried in the Abbey Church-yard of Jedburgh.

[Mr Jeffrey was elected a member of the Berwickshire Naturalist's Club, June 26th, 1862. He contributed two topographical papers to the Club's "History." 1. On Jedburgh.—vol. iv., pp. 344-356. 2. On Ancrum.—vol. v., pp. 128-133.]

*On Lepidoptera, taken mostly in 1875.*I.—*Preston.* By JOHN ANDERSON.

- VANESSA POLYCHLOROS. A specimen of this butterfly was got here by George Strachan, Primrosehill.
- SMERINTHUS POPULI. Several specimens were got here last summer.
- PECILOCAMPA POPULI. One got fluttering among some dead elm leaves.
- BOMBYX RUBI. This and B. QUERCUS were pretty common on Drakemire Moor, last summer; but very difficult to capture.
- PHIGALIA PILOSARIA. Caterpillars are common on birch, at Hoardweil. Newman gives "oak" as its food plant.
- CLEORA LICHENARIA. This was a common moth nearly everywhere, last year. I do not remember seeing a single specimen for two years before.
- SCODONIA BELGIARIA. This was got on Hoardweil Moor by Geo. Strachan.
- ANTICLEA BADIATA. Only a single specimen.
- DICRANURA VINULA. From the number of old cocoons on willow and poplar, this seemed a common moth; but after a careful search, I have only found one perfect; a great many of the others being stung.
- ACRONYCTA LIGUSTRI. Larvæ of this were pretty common on ash, in Blackhouse dean.
- CALAMIA LUTOSA. I got a specimen sitting on the trunk of a tree here; the nearest reeds are those at the "Hen Poo," Dunse Castle.
- AGROTIS SUFFUSA. One at sugar.
- NOCTUA DAHLII. I got a pupa of this under moss on a dyke at Grant's House.
- ORTHOSIA LOTA. Two or three at sugar.
- MACILENTA. Very common at sugar.
- XANTHIA SILAGO. This occurred at Bunkle wood, Preston, and Primrose hill.
- PLUSIA INTERROGATIONIS. A few specimens of this moth were got on Drakemire moor, last summer, by G. Strachan.

II.—*Broomhouse.* By A. ANDERSON.

- VANESSA IO. I failed to capture a specimen of this butterfly, on the side of the Whitadder. It flew towards Preston, where my father saw one in the garden, which also pursued a northern course.
- MACROGLOSSA STELLATARUM. One was got in Cumledge mill.

ANAITIS PLAGIATA. This occurred both on Cockburn Law, and banks of the Whitadder, at Primrosehill.

PTILODONTIS PALPINA. I netted a single specimen at Broomhouse.

NOTODONTA ZIZAC. Two or three of the strange-looking caterpillars of this moth, were got on sallow, at Dunse Castle saw-mill, last autumn.

NOCTUA UMBROSA. Two specimens at Broomhouse.

NOCTUA DAHLII. Rather common among the low oaks at Hoardweil.

XANTHIA SILAGO. Pretty common wherever there are sallows, on the side of the Whitadder here.

CIRRHOEDIA XERAMPHELINA. Not uncommon flying round a stunted ash overhanging the Whitadder; so situated that only a few could be netted.

PHYTOMETRA ZENEA. On Drakemire moor.

III.—*Eyemouth*. By WILLIAM SHAW.

ACHERONTIA ATROPOS. A fine specimen of this moth came to the light of a shop window, Eyemouth. It made a good deal of squeaking, when it was taken out of a bottle.

SPHINX CONVULVULI. I got a very fine specimen of this moth at rest on one of the raised letters of a shop sign; another was got near the same place, much worn; and a fisherman got one at rest on a line in Eyemouth; and Mr W. Sandison, Highlaws, netted another. It has been abundant this season.

CYMATOPHORA FLAVICORNIS. I got a full fed caterpillar crawling down a birch tree, which turned out this moth. Banks of the Ale.

NONAGRIA FULVA. Common among rushes. Banks of the Ale. Mr W. Sandison.

LUPERINA CESPITIS. I got a fine male of this rare moth at sugar. Sea-banks.

APAMEA UNANIMIS. I find I have only one of this moth. I know nothing of its habits.

CARADRINA ALSINES. We got a fair series of this moth, but they were all much worn. Sea-banks.

AGROTIS TRITICI. I got only one of this moth; but was too late in the season to look for more. Sea-banks.

AGROTIS SAUCIA. Mr W. Sandison, Highlaws, was the first to get this moth here, at sugar.

AGROTIS OBELISCA. I got a fair series of this moth, about a dozen, but many of them were much worn. Sea-banks.

NOCTICA GLAREOSA. I got two or three; it comes to sugar. Sea banks.

NOCTUA BRUNNEA. Abundant this season at sugar.

NOCTUA RUBI. Three on Lamberton Moor at sugar.

- TETHEA SUBTUSA. One worn specimen at sugar. Highlaws.
APLECTA OCCULTA. One very worn specimen at sugar. Highlaws.
HADENA PISI. Two of this moth on Lamberton Moor, at sugar.

IV.—*Ayton.* By SIMPSON BUGLASS.

- SPHINX CONVULVULI. I got one of this moth on a sheet which had been left out at night. Ayton.
LITHOSIA QUADRA. I got a fine male this season. Ayton woods.
LIPARIS SALICIS. I got one specimen of this moth, the first I believe taken in Berwickshire. Ayton Castle.
ORGYIA ANTIQUA. This moth must be more common than we suppose, judging from the old webs of the female on the trees, &c. Ayton.
MACARIA LITURATA. Fir woods, Whitfield, Ayton.
THERA FIRMATA. I have netted two this season—probably common. Fir woods, Ayton.
DASYPOLIA TEMPLI. Three of this rare and curious moth have been taken at light here—two males and one female. Ayton.
APAMEA UNANIMIS. We have always passed over this moth for OCULEA, but on sending one to Dr White, we found out our mistake. The reniform is perfectly white. We don't know if it comes to sugar.
CELCENA HAWORTHII. I got one specimen of this moth. Coldingham Moors.
CARADRINA ALSINES. At wood sage. Sea-banks.
AGROTIS SAUCIA. This is the first season I have captured this moth. It comes to sugar. Ayton Castle.
AGROTIS TRITICI. I got a pair of this moth in the garden here. Ayton Castle.
AGROTIS OBELISCA. At sugar. Sea-banks.
AGROTIS PYROPHILA. I only captured one of this rare moth, but fortunately it was in good order, and easily made out. At flowers of wood sage. Sea-banks.
TRACHEA PINIPERDA. This moth must be pretty common, as we got twenty in one night. Sallow blossoms. Fir woods.
TENIOCAMPA RUBRICOSA. At sallow blossoms. Ayton woods.
TENIOCAMPA CRUDA. I have only got three of this common moth. It seems rare here. At sallow blossoms. Ayton woods.
APLECTA OCCULTA. I got two fine specimens of this moth. At sugar. Ayton.
CALOCAMPA VETUSTA. I have only got one of this moth. At sugar. Ayton.
HELIOTHIS ARMIGERA. I got one of this very rare moth. It was captured by Master James Bowhill, Jun., Ayton. Mr Bowhill's garden. Ayton.

Arrival, Departure, and Local Movements of Birds, near Oldcambus, 1875. By JAMES HARDY.

- JAN. 2. The Wild Ducks at sea were about 18 or 20 in number at this date.
- Jan. 4. Starlings that were so numerous during the storm in December, 1874, have left the neighbourhood; and Fieldfares as well. In my walks I counted 8 dead Fieldfares (several others were observed on the railway banks), 3 Missel Thrushes, 2 Song Thrushes, and 1 Golden Plover;—victims of the severe weather then experienced. Stone-chat has left.
- Jan. 16. 4 or 5 Snow-flakes passing; the last for the season.
- Feb. 1. Missel Thrush seen, the first seen since the storm; but there were apparently the usual numbers in song on Feb. 22.
- Feb. 24. About 27 Curlews, in company, proceeding to the inland moors.
- Mar. 4. Flock of Lapwings on the lower leas; on the 10th they had returned to the upland moors.
- Mar. 12. Wild Ducks at sea, 16 or 17 in number.
- Mar. 16. A flock of Curlews, 15 or 16 in number proceeding to the moors from the sea-coast.
- Mar. 22. Very few Redshanks remain on the coast; one heard on the 24th; but none on the 26th.
- Mar. 24. 6 Cormorants remain; only 2 on the 30th. Some Grey Linnets seen; have been absent during winter.
- Mar. 25. One Pied Wagtail arrived; which was again seen on the 26th.
- Mar. 26. Only 6 Curlews on the coast.
- Mar. 29. A few Moor Pipets in a flock on the moors.
- Mar. 30. 3 Redshanks; none on April 1.
- April 1. *Uria Troile*, and a young Northern Diver driven ashore, dead.
- April 6. Number of Ducks reduced to 8, at sea. Only one Cormorant.
- April 7. Only one Heron left at sea-side. A few Moor Pipets on the coast fields; more Grey Linnets have arrived. Water-hen returned to its inland pools. Three Curlews on the coast. Wild Geese heard on the 6th and 7th.
- April 13. Pied Wagtail again appeared; and also on the 14th. One Cormorant, but no Curlews, or Herons, or Ducks.
- April 16. 4 Cormorants appeared, and a single Redshank; and one Curlew. 5 or 6 Wheat-ears arrived on the coast; on the 17th there was only one Cormorant.
- April 18. One Black-cap at Pease Bridge. This was very early for that bird. It continued there alone, and kept up its song till the 30th.

- April 19. No Wheat-ears. 1 Chimney Swallow arrived on the sea-coast; 3 Cormorants and 1 Curlew still present.
- April 20. Several Willow Wrens (*S. trochilus*) arrived in Pease Dean; only a few in song, and that imperfect. No Swallows. Several Wheat-ears; 1 Cormorant.
- April 25. Wheat-ears, three miles from the coast, proceeding inland; and again elsewhere on April 29.
- April 27. 3 Chimney Swallows seen at different points. One Martin at sea-coast; and later in the day, 3 Swallows, a migrating party, swept, without lingering, along the coast, in face of a strong north wind. Two Curlews still on the coast. Several fresh Wheat-ears have arrived. Willow Wrens penetrating into the country.
- April 28. Song Thrush has five young.
- April 29. At Greenlaw. Willow Wrens numerous in the hedges; also at Greenlaw Dean. No Swallows visible. Bank Martins have just arrived above Greenlaw. In the fields were numerous Pipets, not yet scattered over the moors; and flocks of Cushats not yet paired.
- April 30. Willow Wren plentiful, and singing sweetly. Cuckoo heard.
- May 2. Whitethroat arrived, and in full song next day. More Black-caps at Pease Bridge.
- May 3. Black-caps more spread over the woods. Greater Willow Wren (*S. sibilatrix*) here, and in song, at the Pease Bridge; a female Redstart also there. Young Thrush full-fledged. Two Redstarts at Oldcambus, at a spot where I thought I heard the note of the male on April 28. Two Whin-chats arrived. One Swallow seen.
- May 4. A pair of Swallows settled here. 2 Cormorants and 2 Wild Ducks remain at sea; but no Curlews. Cuckoo again heard.
- May 6. The two Whin-chats seen for the last time. Martins settled at the sea-coast, and in small numbers took possession of the cliffs deserted some years since.
- June 16. Two Cormorants, one Curlew, and one Redshank on the coast.
- June 19. Two Redshanks and one Curlew were observed there.
- June 28. Four Redshanks, two Curlews, and 2 Cormorants at the coast.
- July 9. Lapwings in flocks in turnip fields. Curlews still frequent the moors.
- July 12. About 30 Curlews, 12 Redshanks, and 7 or 8 Herons have returned to the coast.
- July 24. Black-headed Gulls have returned to coast. White-throat's song ceases. Missel Thrushes resort to turnip-fields.

Aug. 16. 13 Cormorants, young and old, have returned to their favourite rock at Siccar-point. 3 or 4 Wild Ducks in the sea.

Aug. 19. 12 Herons on the coast. A large flock of Redshanks flying across a bay. Two Stone-chats and one Wheat-ear on the coast.

Aug. 20. Lapwings numerous in turnip-fields.

Aug. 28. Large flock of Moor Pipets on barley-stubble; and again on September 4th, in turnip-fields.

Sept. 13. Larks resuming song.

Sept. 23. Whitethroat last seen. They continued from 7th to 11th to frequent bean and wheat fields so long as there was cover. The last was seen in a hedge-row. Martins last seen at coast.

Sept. 30. Swallows left about this date.

Oct. 15. Woodcocks returned to Aikieside wood.

Nov. 4. 13 or 14 Wild Ducks now on the coast.

Nov. 6. Snow on the hills; about 90 Wild Ducks at sea.

Nov. 15. A pair of Stone-chats last seen.

Nov. 16. About 200 Wild Ducks at sea. This was the greatest number visible at once. They diminished towards the end of the year. In the night-time they resorted to the inland ponds, burns, and marshes; but in the morning retired to the sea, on that part of the coast most beset with rocks, and protected by high cliffs.

Maxwellheugh and Springwood Park. By JAMES TAIT.

THERE has lately been printed in two magnificent volumes —“The Book of Carlaverock,” one of the works compiled by Mr. William Fraser, of the Register House, Edinburgh, and intended only for private distribution. It contains a history of the Maxwell family, whose first settlements in Scotland were at Maxton and Maxwellheugh, both on the banks of the Tweed. In conjunction with “The Maxwells of Pollock,” another work compiled by Mr. Fraser, and printed in 1863, these volumes place within reach some interesting materials regarding the early history of the district to the south of Kelso. Instead of giving mere extracts, we prefer to give a connected account, taken from the works in question, along with what other information is needful to make a consecutive narrative.

In the middle of the eleventh century, when William of Normandy had conquered England, a Saxon chief named Undwin, with his son Maccus, took refuge in Scotland. Their names appear for the first time, in the reign of Alexander I., which lasted from 1107 till 1124. Maccus was the founder of the surname and family of Maxwell. Nothing certain is known concerning the ancestors of Undwin. In the history of England the name of Maccus, son of Anlaf, King of Northumberland, occurs in the tenth century. On the expulsion of King Anlaf, Eric, son of the Danish King Harold, was placed on the throne of Northumberland, but Eric, his son Henry, and his brother Regnald, were slain in the wilds of Stanmore by the hands of Maccus, son of Anlaf. Maccus of Man and the Hebrides was one of the eight sub-kings who, in the year 973, attended Edgar, King of England, on the Dee at Chester, when the king made his annual voyage along the coasts. Kenneth, King of Scotland, was another of the sub-kings who attended Edgar on that occasion. In the Chronicle of Melrose, mention is made of Maccus, *Plurimarum rex Insularum*, as present with Kenneth, King of the Scots, and Malcolm, King of Cumbria. Maccus is likewise called the “Prince of Pirates,” a title of which he seems to have been proud, as it is appended to his name when signing as a witness a charter of Edgar, King of England. The arch-pirate seems to have been a person of

great importance, as his signature follows that of "Kinadius, Rex Albaniae," and of the royal family, and goes before all the bishops, high as was their position in those times. This was in the year 971. Between this royal Maccus and Maccus the son of Undwin, several generations must have existed, of whom nothing is known; but Maccus, the son of Undwin, was an active and distinguished person in the reigns of Alexander I., and David I., Kings of Scotland. Besides other public acts, he witnessed a charter granted by King David "to God, Saint Mary of Melrose, and the Monks of the Cistercian Order, there serving God, of the lands of Melrose, Eldune, and Dernewick, the pasture, wood, pasturing of cattle for the use of the monks, in the granter's land and forest of Selkirk and Traquair, and fishing in the waters of the Tweed; and, besides, in augmentation of their revenues, Galtuneshalech and the whole land and wood of Galtunesside." The charter is dated at Erchildon in June, but the year is omitted, though it must have been previous to 1152. Maccus likewise witnessed a charter of King David in 1113, founding a monastery at Selkirk; but in 1126, John, Bishop of Glasgow, procured the removal of the monastery from Selkirk, to the Church of the Virgin Mary at Kelso, then called Calkow. This was close to "Maccuswell," the territory of Maccus, which he acquired from King David about the same time.

THE BARONY OF MAXWELL.

The lands which Maccus obtained in Roxburghshire from King David the First, were on the south side of the river Teviot, and opposite the castle of Roxburgh, not as Jeffrey says, "between the Teviot and the Tweed;" but the original charter granting to Maccus the lands, which were afterwards formed into the barony of Maxwell, has not been preserved, and so the precise extent of the lands cannot now be ascertained. In the "Maxwells of Pollock," Mr Fraser says, "one grant bestowed upon Maccus, comprehended the lands erected into the barony of Maccuswell or Maxwell, which lies on the south side of the river Teviot, where it flows past the ruins of the famous castle of Roxburgh. On the west the barony was bounded by the Teviot, on the north by that river, and by the Tweed after these rivers unite. The parish of Sprouston formed the eastern and part of the northern

boundary, which was completed by the parish of Eckford." It appears that Maxwell was a barony previous to the year, 1373. The lands which had been granted to Maccus, soon came to be known as the lands of Maccuswell, afterwards contracted to Maxwell, and, as subsequently described in the charters of his descendants, they are known to have included the town of Maxwell, Maxwellheugh, the Mains, Springwood Park, Pinnaclehill (or Pendiclehill), the Woddens, (Easter and Wester), the Softlaws (Easter and Wester,) Chapel, the Kirklands, &c. The barony of Maxwell was estimated as a forty-pound land of old extent, and the lands had probably been part of the royal domains. One of the parts, immediately opposite the castle of Roxburgh, and coming close to it, was called the King's Haugh. The lands may have been bestowed upon Maccus by King David in token of his friendship for Maccus, and at all events it is certain that, being opposite the castle of Roxburgh, and close to it, they would not have been granted by the king to any subject who did not hold a special place in the royal favour. Probably about the same time Maccus was appointed Sheriff of Roxburghshire, an office which was held by Herbert of Maxwell, the son of Maccus, and also by John of Maxwell, the grandson of Maccus. John of Maxwell, lord of that ilk, who had become a knight, obtained from Robert II., a charter, dated 11th November, 1373, of the lands of Softlaw, in the barony of Maxwell, forfeited by William Stewart, who had rendered allegiance to the King of England. On the 14th May, 1476, Robert Maxwell, bailie of the barony of Maxwell, specially constituted by the lord thereof, in a court of that barony, gave public warning in the name, and on the part of, Lord Maxwell, that whoever had any lands in tack in any way in any part of that barony, should be wholly denuded of their lands and tacks after the Feast of Pentecost, and should not have them until they received them anew from the foresaid lord and his bailie. Robert, fifth Lord Maxwell, received from King James V., for services as Warden of the West Marches, another charter of forty pound lands of old extent of the barony of Maxwell, and many other lands and baronies, which were all united into a free barony to be called the barony of Maxwell; and the castle of Carlawerock, in Nithsdale, was ordained to be the principal messuage thereof.

His grandson, John, Earl Morton, Lord Maxwell, protested in the parliament of 1581, that he had right to hold "the lands of Pendicle Hill, Wester Wooden, Saint Thomas's Chapel, and half the Haugh, and the half mill of Maxwell, within the barony and lordship of Maxwell, free of any claims on the part of Sir Thomas Ker of Ferniehirst, and others." It was admitted by the king and Parliament, that this protest was well-founded.

The barony of Maxwell continued to be the property of the Lords Maxwell after their creation as Earls of Nithsdale, but, after having been in the uninterrupted possession of the descendants of Maccus for about five centuries, the barony was acquired from Robert, first Earl of Nithsdale, in 1631, partly by the Earl of Roxburghe, and partly by Sir Andrew Ker of Greenhead, who changed the name of Maxwell into Bridgend, from the situation of the house, which was built in the haugh near an old ford in the Teviot. The first break in the Maxwell connection was in 1608, when, because of the unhappy slaughter of Sir James Johnstone, of Johnstone, John, eighth Lord Maxwell, was forfeited. Robert Maxwell, brother of John, was afterwards restored to the family titles and estates, and appears to have claimed the lands which belonged to Lord John, at the time of his forfeiture. But the last connection of the Maxwells with their ancient barony was broken in 1631, when the "fourtie pund land of auld extent of the baronie of Maxwell," was appraised from Robert, Earl of Nithsdale, by William Haig of Bemerside. Haig disposed the lands to the Earl of Roxburghe, who on the 21st June, 1634, obtained from the crown a charter of the lands of "Maxwellhewche, the half of the land callit Maxwellhauch," and other subjects. By this charter, the Earl of Roxburghe obtained the superiority of the lands, which had been acquired by Sir Andrew Ker of Greenhead. This led to a dispute in the middle of the 18th century, when the Duke of Roxburghe, as superior, claimed the right of jurisdiction, which Sir William Ker of Greenhead, claimed as proprietor of the lands. The question was submitted to the Solicitor-General, Erskine, who on the 6th Nov., 1785, gave his opinion, that the Duke, as baron and superior, had a right of jurisdiction over the barony of Maxwell by his charters, and that the foundation of this right had been acknowledged and homologated by the family

of Greenhead. The portion of Maxwell which became the property of the Earl of Roxburghe has descended to the Duke of Roxburghe, while the larger portion, of which Sir Andrew Ker became the owner, was purchased in the middle of last century, by Sir James Douglas, second son of George Douglas of Friarshaw, a branch of Cavers, and ancestor of the present Sir George Henry Scott Douglas, Bart., M.P. Sir James Douglas changed the name of Maxwell to Springwood Park.

THE CASTLE OF MAXWELL.

On the fair domains which Maccus had acquired he built a residence for himself, in the style of the baronial mansions of those times, and around his castle was gradually formed a town or village, occupied by his retainers. Of this castle no part of the building now remains, and even its site is not known with certainty. It is supposed to have stood in a field between Pinnaclehill and the present village of Maxwellheugh, where are still indications that buildings of considerable dimensions had formerly existed. The Motehill adjacent is believed to have been the seat of the baronial courts held by Maccus for the administration of justice. It is now enclosed, and forms part of the garden grounds of Pinnaclehill. It is about 33 feet high, and has a slope of 35 yards. As a Border fortress, the castle of Maxwell was liable to suffer from the hostile raids of the English, and among the places destroyed by the Earl of Hertford in 1545 were Maxwellheugh, Bridgend, St. Thomas's Chapel, East and West Wooden, and Harden, all in or connected with the barony of Maxwell. The mansion of Maxwell was afterwards repaired or rebuilt, but the castle of Carlaverock, which had been acquired at an early date by the Maxwells, being the key to the south of Scotland on the shores of the Solway, required all the energies of the Maxwells to maintain it against the English invaders. Hence, it gradually became the chief family residence, and the castle of Maxwell fell into decay. The old mansion of Bridgend stood in the haugh, near an old ford of the Teviot, where are two silver pine trees, and it is inferred that there was a bridge across the river, though history is silent on that point, and the existing bridge was not built till 1794, when, also, roads were made from Kelso to St. Boswells; to Fireburn Mill, on the

Coldstream road; to Orange Lane, by way of Eccles; and from the ford at Newton Mill, by Ednam, to Highridge Hall. Previous to that date there was no bridge, and persons were sometimes drowned when crossing by the ford. In 1718 the Bridgend house was accidentally burned, while it was the property of Sir Andrew Ker of Greenhead. At that time the mill stood a little farther up the Teviot than it is now.

In 1750 the estate of Bridgend was purchased by James Douglas, second son of George Douglas of Friarshaw, in the parish of Bowden, an estate which had been possessed by his ancestors since the middle of the sixteenth century, when they branched off from the family of Douglas of Cavers. James Douglas was Captain of the ship *Alcide*, which he had taken from the French, and in which he brought over Captain Hall, with an account of the victory and surrender of Quebec in 1759. Captain Douglas was created a knight on the occasion, and received from the king presents of considerable value. Before that date, Sir James had attained considerable honour, as will appear from the subjoined letter, written by a brother, and of which we have obtained a copy from his descendant, Sir George H. S. Douglas, the present representative of the family.

“LONDON, July 18, 1745. DEAR FATHER, I wrote lately, to which refer. What is mentioned in the papers about Cape Breton is true, &c. I have farther the pleasure to tell you that Commodore Warren writes to the Lords of the Admiralty, that by the good conduct and courage of Captain Douglas, of the *Mermaid*, he had taken the *Vigilant*, a fine French man-of-war of 64 guns, bigger than our 74 gun-ships, laden with cannons, ammunition, &c., and stores of all kinds, and that as a small reward of Capt. Douglas's service, he had appointed him Commander of the *Vigilant*, besides saying a great deal in James's praise to their lordships, on which I heartily congratulate you, and desire you will acquaint all our relations and friends of the good news, for it is a most gallant action, and your son has the honour to command the first French man-of-war of any consequence we have taken, and redounds greatly to his praise, as it will likewise to his profit. The particulars will be in the Gazette on Saturday, no doubt, but I have no letters from James, the above account being sent me by one of the Lords of the Admiralty. No time to add more at present—but that, I am, DEAR FATHER, your afft. and dutiful son. HENRY DOUGLAS.*

[* MS. letter from Henry Douglas, merchant in London, to his father, George Douglas, of Friarshaw.]

In 1761 Sir James commanded the fleet at the Leeward Islands, took Dominica, and had a broad pendant at the siege of Martinique in 1762. In June 27th, 1786, he was created a baronet, as a reward for the gallant services rendered to his country. He married Helen, daughter of Sir Thomas Brisbane, and had two sons, George and James. He died in 1787, and his decease is noted as follows in the *Scots Magazine*:—"Nov. 2, 1787. At Springwood Park, near Kelso, Sir James Douglas, Knight and Baronet, Admiral of the White, having been in His Majesty's Service 72 years." He was succeeded by his elder son Sir George, who was born in 1754, who was in the 25th Regiment, and from that went into the Guards, and who for some time represented the county in Parliament. He married Elizabeth, daughter of David, Earl of Glasgow, and had an only son John James, who married in 1822, Hannah Charlotte, only daughter and heiress of Henry Scott of Belford, on Bowmont water, descended from the ancient Scotts of Horsliehill, and in consequence assumed the name of Scott by sign-manual, in addition to that of Douglas. Sir John James Douglas was a captain in the 15th Hussars, and served in the Peninsula, was at Waterloo, and received a medal for his services on that occasion. His family consisted of one son and three daughters; and in 1836 he was succeeded by his only son, Sir George Henry Scott Douglas, who was born on the 19th of June, 1825.

THE PARISH OF MAXWELL.

On the estate of Maxwell, Maccus built a church for the accommodation of himself and his dependents. It was dedicated to Saint Michael, and was in the archdeanery of Teviotdale and diocese of Glasgow. The parish of Maxwell, which was afterwards formed, was about two miles in length and one mile in breadth. It was probably of the same extent with the original barony of Maxwell, though that barony was afterwards much more extensive. After the Reformation the parish of Maxwell was united to that of Kelso. Maxwell appears to have comprehended that part of the united parishes which lies to the west and south of the Tweed as far as the parish of Roxburgh, which was the boundary of Maxwell on the west. The church of Maxwell was erected in the haugh now called the Bridgend Park,

near the junction of the rivers Tweed and Teviot, which was the centre of the parish, and therefore conveniently situated for the attendance of parishioners on divine service. In the year 1159 the church of Maxwell was gifted by Herbert of Maccuswell, Sheriff of Teviotdale, and son of Maccus, to the monks of Kelso; and in the same year the grant was confirmed by King Malcolm IV. "It was again confirmed," says Mr Fraser, "in 1180, by Jocelyn, Bishop of Glasgow, by King William the Lion in 1195 and 1199, and by Walter, Bishop of Glasgow, in 1232." To this church was granted previous to the year 1180, by Herbert, son of Maccus, an oratory which had been founded in the territory of Maccuswell in honour of St. Thomas the Martyr, with a toft which he had given to that oratory. The grant was confirmed to the monks of Kelso at the same time, and by the same parties as the church; and the grant of the oratory and toft was again confirmed by Pope Innocent IV., both in the years 1243 and 1254, when the monks entered into an agreement with the lepers of Alencromb, that these subjects should be held in connection with the church of Maxwell. The church of Maxwell seems to have been served by a vicar, and in 1489 Sir John Robsoun was "perpetual vicar." Sir John, along with Sirs John Wauch, John Atkynson, and John Waik, perpetual vicars of Edynham, Mertoun, and Bolden, witnessed, in the monastery of Kelso, on the 20th April, 1489, the resignation of John Ker, of Cavertoun, of three husband lands in Hownam, in the hands of Walter Ker, of Cessford, the superior.

In the rentals of the Abbacy of Kelso, are frequent notices of the church and parish of Maxwell, and we subjoin some notes from that and other sources, which we quote from "The Maxwells of Pollock":—

"The towne of Maxveill with the manis, yielding in quheit 6 bolls, in beir 1 chalder, in meill 1 chalder 4 bolls: Pendicill Hill, in quheit 1 boll, in beir 4 bolls, in meill 4 bolls; Ester Voddene, in quheit 3 bolls, in beir 8 bolls, in meill 8 bolls; Vester Vodden, in beir 2 bolls, in meill 8 bolls; Vester Softla, in quheit 3 bolls, in beir 6 bolls, in meill 8 bolls."* In 1567, John Pamer, for the "Ferrie Cwbill at Maxveill," was rated at ten pounds.† In 1574 and 1576, the stipend of the reader at Maxwell amounted

* Liber de Calchou, p. 509

† Ibid, p. 531.

to £16, with the Kirkland, "to be paid out of the third of Kelso be the taxmen or parochiniers of Maxwell."*

In two other rentals of Kelso, about 1570, the "Cobill fornent Maxwell" is also stated at the same sum of £10; and in one of these rentals of the kirks set for money, the kirk of Maxwell is entered at £66 13s 4d; and in the assignation of Kelso, the kirk of Maxwell is entered at the same sum.†

In the taxed roll of tiends of the lordship of Kelso, granted to his Majesty in October, 1612, the "Kirk of Maxwell" is stated at £10.‡

In an information concerning the kirks of the Abbey of Kelso prepared about the year 1620, it is stated that the Kirk of Maxwell is "vnplantit." "Ane litle kirk, and the cure thereof servit be the minister of Kelso. The renttis thereof are small, and in sindrie mennis handis for mony zeiris zit to ryn, and the dutie of the unhibit tax extends onlie to 1^c mercis, and the same wes set in tak be Erle Bothwell." §

In a paper entitled "Form of the setting downe the teyndis for obedience of the commission be Mr James Knox, in Kelso," 26th April, 1627, the tiends of the Barony of Maxwell are thus stated:—

1. "Imprimis the number of the communicants being examinit according to the buikis of the examination going befor the last communion, ar fund to be 14 hunder four scoir threene. Of the quhilk number, twa hunder threttie three did appertaine to that pairt of the parishe quhilk is callit Maxwell.

2. "This part of the parische quhilk is callit Maxwell past memorie of man, hes bene servit be ministeries of the kirk of Kelso, and wes vnited thereto be the lait erectioun, being ane kirk of the same Abbacie.

3. "The length of the parische is about twa myll. The breid ane myll. The kirk standethe derectlie in the middis.

4. "The ministers stipend is aught chalder of wittal, twa part meill, third part beir, Lowthiane met; ane hundredth merkis, with viccarigs of Kelso and Maxwell. The viccarigs of Maxwell-heughe, worth — possesst of lait be wmqhill John Ker, of Duddingstown, and now acclaimit be ane bastart of his, and Thomas Ker, of Cavers, pretendit tenant to the said Andro Ker, bastart.

"The towne of Maxwellheugh, with the Manis, Wester Wodden and Howden," (paid) "twa chalder and ten bollas, to wit of quheit, sex bollas, of beir ane chalder, of meill ane chalder four bollas.

* Wodrow Miscellany, vol. i., p. 375; Buik of Assignations, vol. i., p. 86.

† Original rentals in Roxburgh Charter chest.

‡ Ibid.

§ Ibid.

"Pinnekill-Hill nyne bollas, to wit, of quheit ane boll, of beir four bollas, of meill four bollas.

"Eisteir Wodden ane chalder three bollas, to wit, of quheit thre bollas, of beir aught bollas, of meill aught bollas. The tiendis of this steiding is led be the possessoris of the ground.

"Wester Softla ane chalder ane boll, to wit, of quheit thre bollas, of beir sex bollas, of meill aught bollas.

"Chapell, fourteen bollas, to wit, sex bollas beir, aught bollas meill. The tiend of this rume is led by the possessour. The Hail tiendis of Maxwell parochin are thoct to be worth, communibus annis, sex hunder merk."*

In a locality of stipend made by the Commissioners for Tiends, on 16th December, 1635, in favour of Mr Robert Knox, minister of Kelso, there is provided out of the tiends of Chappell, and Pinnacle-hill, belonging to the Lord Jedburgh, eight bolls meal, six bolls bear, with £66 13s 4d money, and out of the tiends of Maxwellheugh, half Brigendhaugh, Kingshaugh, Easter Wooden, and Howden, pertaining to Andrew Ker, of Greenhead, two chalders, five bolls, two firlots meal, and ane chalder, four bolls, twa firlots, twa pecks bear.†

From a rental of the Earl of Roxburgh's lands in Teviotdale, it appears that, at Whitsunday, 1682, the lands of Maxwellhaugh, Easter Wooden, Howden, half Brigend Haugh, and Kingshaugh, paid yearly of valued tiend duty sixty bolls of victual, and that the lands of Chappell and Pinnacle-Hill paid yearly fourteen bolls of victual and £66 13s 4d. Wester Softla and Wester Wooden paid yearly of valued tiend-duty £133 6s 8d, and Easter Softla paid yearly sixteen bolls of victual. All these tiends were paid to the minister of Kelso, as part of his stipend, with the exception of the £133 6s 8d for Wester Softla, and Wester Wooden.

In the same rental, the fishing of the water of Maxwell is entered as paying yearly six dozen of salmon at 6s per piece, £43 4s.‡

Subsequent to the Reformation, Paul Knox, a nephew of John Knox, was minister of Kelso and Maxwell in the year 1574; and in the year 1575, John Howie, or Howieson, had the spiritual charge of Sprowstoun, Maxwell, and Lempitlaw. William Balfour, minister of Kelso, in 1585, was translated to Maxwell in 1589, but returned to Kelso in 1591. James Knox, probably grand nephew of John Knox, was presented to the vicarage of Maxwell, by James VI., on the

* Ibid.

† Ibid.

‡ "This payment must have been made half-yearly to produce the cumulo amount. No doubt many of the fish were taken out of Maxwheel."

15th November, 1605. As vicar of Maxwell and Kelso, he was allowed certain old vaults in the Abbey of Kelso, which he used as a manse, one of which was a hall and kitchen, while another was used as a bedroom and closet, but both were much under the level of the adjoining ground. Robt. Knox, eldest son of James Knox, succeeded his father as vicar of Kelso and Maxwell in 1633; and in addition to the accommodation in Kelso Abbey, occupied by his father as a manse, he received two galleries or "to-falls," one to walk and study in, the other as a bed-chamber.

The grave-yard of Maxwell church is still preserved in the Bridgend Park, and has through the care of Sir George Douglas, been enclosed with a wall, and ornamented with four cedars of Lebanon, planted in the form of a cross. It is in the haugh not far from Maxwellheugh Mill; and some of the tombstones are still so well preserved as to show the names of persons whose ashes repose below. There is more difficulty in fixing the site of the oratory, which was dedicated to St. Thomas the martyr, and which was appended as a gift to the monks along with a toft. In Stobie's old map, it is marked in a field, called St. Thomas' Lands, which lies in front of the present mansion house. Three beech trees, in the shape of a triangle, are believed to mark the spot. On the other hand, Morton says it stood at Harlaw, near the head of Wooden Burn. Jeffrey thinks the name Pendicill or Pendicle indicates the site of the oratory, which was a chapel "appended" to the church of Maxwell, and that the chapel probably stood near the "law" or tumulus at the entrance gate of Pinnaclehill, or *Pendiclehill*, while the "toft" was near the Maisondieu. The Maisondieu or hospital of Roxburgh, for the reception of pilgrims, the diseased, and the indigent, was situated on the south side of the Teviot, but no vestige of it now remains.

The site of the old Maxwell barony is now, of course, completely changed. The old house of Bridgend was taken down in 1756, and the name changed to Springwood Park. The archway, near the end of Kelso Bridge, was designed by Gillespie Graham, and was erected by Sir John James Scott Douglas, in 1822. The situation of the present house of Springwood Park is well chosen, and it commands some picturesque though not very extensive prospects. The grounds are romantic, and the park contains some splendid trees.

The garden is also well laid out, and is kept in excellent order. Much improvement has been made on Springwood Park by Sir George, whose taste for forestry and landscape gardening, is of a most refined nature. Any one visiting the grounds at the present time, after an absence of a number of years, could not fail to be struck with the magnitude as well as the beauty of the various alterations. The policy grounds have undergone considerable changes. Approaches have been altered, new walks made, views opened up, trees thinned, and others planted with the view of giving a pleasing contrast to foliage and outline, while old hedges have been rooted out and replaced by handsome iron railings. The green walk to the mausoleum is a most imposing sight,—the magnificent hedge of yews on either side presenting a fine effect. The shrubberies are very extensive. The laurels are annually cut down to about four or five feet, and the flowering shrubs, yews, hollies, arbor-vitæ, &c., rise up among the trees, and at all seasons, from their symmetry and varied hues, have a pleasing appearance—the result of judicious thinning and planting which Sir George has for years carried out. There are many fine trees in the shrubbery, such as beeches, variegated oaks, variegated planes, golden, silver, and entire leaved ashes, weeping elms, maples, Turkey oaks, and cedars of Lebanon, one of which latter, though still a young tree, measures $6\frac{1}{2}$ feet in girth, at four feet from the ground. There is also a larch $8\frac{1}{2}$ feet in girth at four feet from the ground, and at five feet, a plane measures 13 feet round. There are also birches, service trees, cut leaved alders, walnuts, chestnuts and a beautiful fern-leaved beech.

In the park are several trees worthy of notice, though the high gale in the early part of last year did great damage to many. In Maxwell Park two fine old wych elms were greatly mutilated; their girths are at four feet from the ground, respectively 13 feet and 16 feet. There is another splendid tree of the same sort on the south side of the east approach, the bole measuring 13 feet in circumference.

There is an interesting young wych elm on the north side of the east approach, being a shoot of the famous trysting tree which stood at Friars, on the opposite side of the Teviot. The famous poplar at Maxwellheugh, (*Populus monilifera*,) is also deserving of notice. Ten years ago it measured 90

feet in height; that was previous to its branches being lopped. This was rendered necessary for the safety of the public, as it stands near the turnpike road, and large branches were frequently broken off in high winds. In 1828, the height of the main stem was 26ft. 6in. and the girth at ground was 31ft. 8in., at 12 feet, 19ft. 6in., the smallest girth being 16ft. 10in. In May, 1859, the girth at ground was 32ft. 6in., at twelve feet, 24 feet, and at smallest part of stem, 18ft. 8in., while it was calculated to contain 760 feet of wood. In 1874, the girth at ground was 34 feet, the smallest girth being 20 feet 6 inches. The height of the main stem to the first branch was 16ft. There is also a crab tree of unusual dimensions near the east side of the Chapel Park. The girth at four feet from the ground, is 9 feet 10 inches, the circumference of branches, 170 feet, while the tree is nearly 40 feet high.

Sir George H. S. Douglas, the present proprietor, was for some time a captain in the 34th Regiment, and has been distinguished for his activity in connection with the volunteer movement since its commencement. As a county gentleman he is very active, and in nearly all county business takes a prominent part, while he is uniformly affable and agreeable to all classes of the community. At the General Election of 1874, he was chosen to represent the county in the House of Commons, as his grandfather, the first Sir George Douglas, had been formerly.

Localities for some Border Plants. By MR. ARTHUR H. EVANS

1. *HABENARIA BIFOLIA*. Pond on the Guinea Hill, Bowsden.
2. *HABENARIA VIRIDIS*. West Hare Crag, Scremerston.
3. *GENISTA ANGLICA*. Black Heddon Hill, Kylee, Beal.
4. *ANAGALLIS TENELLA*. 3rd marsh from the north of Kylee Hills.
5. *GENTIANA CAMPESTRIS*. West Hare Crag, Scremerston.
6. *MELILOTUS OFFICINALIS*. }
7. *CARDUUS NUTANS*. } North Pit Hill, Scremerston.
8. *PYROLA MEDIA*. Wood to the west of West Hare Crag,
Scremerston.
9. *VERONICA SCUTELLATA*. Pond on Unthank Moor.

Zoological Notes. By ANDREW BROTHERSTON, Kelso.

SWALLOW (*Hirundo rustica*), L.—A young bird of a dingy white colour, was shot at Wallace Nick, near Kelso, in the end of August, 1875. There was another observed at the same time, but it escaped. Of late years this species has been decreasing about Kelso, for which, I can see no apparent reason, especially as its congener, the Martin, is as plentiful as ever it was if not more so. But the falling off seems to be only very local, as I saw many old birds at Lochton, Sept. 27th, 1875 (this was after they had left here), and on October 5th, there were some hundreds of *young* birds resting on the telegraph wires leading to the race-course. I could not detect an *old* bird amongst them. From this it would appear that the old and young birds migrate in separate flocks.

ROLLER (*Coracias garrula*), Penn.—A fine female of this rare and beautiful species was shot at Scremerston, Northumberland, by Mr P. Cowe, on the 22nd of Sept. 1875. (I believe there was another shot at Dalhousie, on October 4th, following.) When first seen it was perched upon a "stook," from which it alighted on the ground now and then. When the stomach was opened it was full of beetles.

QUAIL (*Perdix coturnix*), Lath.—About the 24th of Sept., 1875, a Quail was shot near Eccles, Berwickshire. Upon making enquiry, I learned that there had been a large number liberated by a gentleman, a short time previously in that neighbourhood; so that in all probability this example was one of them. I believe that many of the specimens that are obtained in this country, are either escapes from game-dealers, or set at liberty like the above. Out of the thousands that are imported alive annually to this country, many birds make their escape. I may here mention, that when a school boy, there was a nest and 13 eggs got in a corn-field at Ferneyhill, near Ednam.

GREAT SHRIKE (*Lanius excubitor*), L.—Mr Cowe was also fortunate in securing two very fine specimens, both males, of this comparatively rare bird. One of them he shot at Lochton, Berwickshire, in the end of October, 1875, the other at Scremerston, December 16, 1875. In both birds the breast was indistinctly barred and freckled, and the black patch on the cheek was continued above the eyes, most distinct in the last killed, although it appeared to be the younger bird. The other had the rump nearly white, which seems to be one of the specific distinctions of *L. excubitoroides*. One or two spots in the closed wing is, I think, of little use, either as a specific mark or denoting age; the one got at Scremerston, and also one that I have, which was got near Berwick a few years ago, has two spots, while the Lochton bird

shows only one, although apparently the most mature specimen otherwise. Besides the whitish rump, the two outer tail feathers are wholly white, except a narrow oblong spot, about one-third the length of the feather, on the inside of the inner web of the second. The contents of the stomachs of Mr Cowe's two specimens may be interesting to some. In the one got at Lochton, besides numerous beetles, were the remains of a newt (*Triton punctatus*), the "Ask" of the Borders; and in that from Scremerston, there was nothing but beetles. I had another Butcher-bird (a male) from Bowden, on March 25th, 1876. It had been eating a mouse; the head, quite fresh, but much crushed, being all that was in the stomach, except a very few small pieces of the elytra of beetles. The remark of Morris, that the spots in the wing are either one or two, "according as the upper one is or is not hid by the superincumbent feathers," is correct in regard to this specimen. The great wing covers being a little farther up or down, either expose or hide the upper spot.

SHOVELLER, (*Anas clypeata*), Penn.—I got a male, in fine plumage, which was shot on Hoselaw Loch, April 8th, 1876. There are, at this date, a few more of them on the Loch. I never got it inland before. I have an example shot some years since at Fenham, Holy Island.

LIGHT COLOURED VARIETY OF WILD DUCK? (*Anas Boschas*) Penn.—A very light coloured bird—a female—which I take to be an accidental variety of the Wild Duck, was shot on the Teviot, near Roxburgh, in the beginning of November, 1875. The bill and feet are of the same size, form, and colour as in the Mallard, the size of the bird is also the same, besides it was in the company of Wild Ducks, all of which is strongly in favour of its being that species. The following is a description of it:—Iris, brown; head and neck, very pale dun (this colour limited to the same part which is dark metallic green in normal form), darker with a number of dark brown spots about the cheeks and forehead; breast and belly white, the breast with a slight yellowish tinge; the back white, with a few dark freckles near the centre of the feathers, gradually becoming darker near the tail. In the wings, the relative lengths of the primaries are the same as in the Wild Duck. The greater wing coverts, dark in the centre gradually shading off into a broad white margin; lesser wing coverts mostly white, a few of the largest with a dark streak in the centre; tertiaries, some of them white, others chesnut, with a darker centre; primaries, outer webs white, inner, brownish grey; secondaries, very light speckled grey on the inner webs, outer webs black with green and purple reflections, bordered and tipped with white. Tail, outer webs light brown; inner, greyish brown; a dark streak in the centre, which widens near the tip.

LITTLE AUK (*Uria minor*), Bris.—After some very stormy weather, a very fine male of this inhabitant of the Arctic ocean, in a somewhat exhausted state, was caught near Sunnilaws, Northumberland, November 21st, 1875. Although not much spent, the stomach was completely empty; not even a bit of gravel or slime being found in it.

GREY PHALAROPE (*Phalaropus lobatus*), Penn.—One, a male, was shot on Girrick pond, near Mellerstain, Berwickshire, on the 19th of November, 1875. This was a solitary bird, no other being with it, although it was observed on the pond for several days. This is a neat little bird, with lobed feet, resembling in form those of the coot.

FOOD OF THE HERON.—The food of these voracious birds consists principally of small fish, of which they destroy large numbers. Besides these they feed on rats, mice, frogs, &c.; one that I examined, which was shot near Morebattle, had upwards of twenty newts in its stomach.

GOOSANDER (*Mergus merganser*), L.—This is another destructive bird on fish; much more so than the Heron, as its food is more confined to them. The Goosander is a regular winter visitant to the Tweed and its tributaries every season, also to Yetholm and Hoselaw Lochs. Usually most are seen in this neighbourhood, when they are on their northward journey in the spring. During the last winter, 1875-6, they have been much more numerous than usual, probably owing to the mildness of the season. In hard winters they go farther south, and also frequent the sea-coast more than in a mild season. They are widely spread in the district; besides being found on all the lower parts of the river, they have also been got in the upper—Selkirk, Hawick, Lauder, &c.

TUFTED DUCK (*Anas fuligula*), Penn.—This graceful bird is one of the commonest of our winter visitors—of the duck kind—to the Tweed, and also to the lochs and ponds. On Yetholm and Hoselaw Lochs, large flocks are to be seen every winter. Unlike most of its congeners, there is a large proportion of adult males, indeed so far as my experience goes, the females and young are comparatively rare, whereas in the Golden Eye, (*Anas clangula*)—another common species in the same localities—there are *very few* old males, but large numbers of young males and females. The Wigeon, *Anas penelope*, and the Pochard, *Anas ferina*, are both plentiful. The Scaup, *Anas marila*, although rare generally in this district, is frequent on Yetholm Loch. I have a Long-tailed Duck, *Anas glacialis*, which was shot on the same loch. It is a young male in immature plumage, with (which is very uncommon in that state) one of the long tail feathers fully grown.

NUTHATCH, (*Sitta Europæa*), Penn.—About 1850 I caught one

of these birds in her nest, she was sitting on eggs, and sat so close, that rather than leave them she allowed me to "clap" her, but not without showing fight afterwards. It was in a narrow strip of plantation between Houndridge and Harpertoun, near Ednam. The nest was built in a hole (which to all appearance was made by the birds themselves), in the decaying stump of an oak. The hole did not go far in, but was just inside of the bark; the entrance was about three feet from the ground. So far as I can remember, it was a very poor nest—only a few withered leaves. In the vicinity of the nest were several other decaying stumps, in most of which were similar holes to that in which the nest was placed, all apparently made by the same sort of birds, probably in search of insects. I am not aware of these birds having been recorded as breeding in Scotland before, but I have not the slightest doubt of it being the Nuthatch, as we have no other bird that can be mistaken for it. In Mr R. Gray's "Birds of the West of Scotland," he records four Scottish examples of the Nuthatch; one of which was killed in a garden near Dunse, in March, 1857. He says "It will doubtless be found to be a more frequent visitor to Scotland than has been hitherto supposed, especially in the border counties, where the extending wood may prove an additional attraction to a bird of its habits."

TWITE, (Mountain Linnet), (*Linaria montana*), Selby.—This is the "Heather Lintie" of the Border districts. It frequents upland moors and hills. I have seen it in the Bizzle Glen on Cheviot, in the month of July. It appears to be known over a wide district as the "Heather Lintie:" away above Peebles it is known by that name, and "Our old shepherds," says Mr. Hardy, referring to the Lammermoors, "used to know the 'Heather Lintie' and its nest." It is known as a distinct species in these districts, from the Grey or Whin Lintie, *L. cannabina*, although many, even bird-fanciers, consider the Rose Lintie distinct from the latter; but this is not to be wondered at, as some of the older ornithologists were of the same opinion. Wherever there are alders in this neighbourhood, the Lesser Redpole, *L. minor*, and the Siskin, *Carduelis spinus*, are to be seen in small flocks every winter.

CHIEF CHAFF, (*Sylvia rufa*), Tem.—I believe this to be a rare bird with us, having seen a very few that I was certain of. It is not easily distinguished by sight from the Willow Wren, *S. trochilus*,—a very common bird on the Borders—unless when in the hand, but the song is very different. One of its notes has been likened to "Chiff Chaff," whence the name, or as Fleming has it, "Chip Chop." The Garden Warbler, *S. hortensis*, I have frequently seen in this neighbourhood—at Ednam, Springwood, and Hendersyde Park. The Blackcap Warbler, *S. atricapilla*,

frequents the same places, but in greater numbers; some of these birds (the Blackcap) remain very late with us. I got one at Ednam on Dec. 25th, 1865, and saw another at Edenmouth, Oct. 20th, 1872. A rarer species is the Wood Warbler, *S. sylvicola*. Although it prefers the larger woods, I have seen it several times in gardens about Kelso. The Grasshopper Warbler, *S. locustella*, is a regular and not uncommon visitor to many parts of Scotland, but I have never detected it in this neighbourhood. Shy and vigilant in its habits, it may have escaped notice.

THE DUNLIN, (*Tringa variabilis*), Selby.—I have seen occasionally during the summer season, on the margin of Yetholm Loch, although I have never found the nest; it most likely breeds in the marshy ground at the south-west end of the Loch. It is said to breed in the same sort of places as the Snipe, several pairs of which breed annually in the bogs between the Loch and Primside.

GREAT SNIPE, (*Scolopax major*), Penn.—The Solitary Snipe will, I believe, be more frequent on the Borders than is generally supposed. I have seen it several times in the autumn at Yetholm Loch. And from the descriptions of various sportsmen, I have been convinced that they had shot that species. But as is too often the case with rare birds, if eatable, they go to the pot, and if not, to the "gamekeepers' museum," or they are left to rot where they fall. Like the common Snipe it will sometimes allow of a near approach before rising, but when on the wing it flies much slower and heavier than that species.

KINGFISHER.—Very few specimens of this beautiful bird have been seen on the Tweed in this locality, during 1875. There is now not over one for every six which might have been seen before the flood of 1874, referred to in last year's "Proceedings," p. 285. In some of the smaller streams, as the Bowmont, it appears not to have made any difference, the water not rising so high in them. (Mr. Gray mentions the case of a nest which he saw on Girvan water, in which the "entire family group" were drowned).

CANADA GOOSE, (*Anser Canadensis*).—In addition to the five which were shot by Mr. Cowe, Dowlaw, (see "Proceedings," 1872, p. 435), I have since learned that Mr. J. Johnson, of Tweedbank, got three about the same time at Adderstone Mains.

MISSAL THRUSH, (*Turdus viscivorus*), L.—This bird is of a shy, wild nature, except while nesting, when it is the opposite. The nest is usually placed in the cleft of a tree, frequently on a roadside, or in the vicinity of a house or garden. When sitting on eggs the female is not easily frightened from her post. Striking the tree with a stone, and even firing a gun close to the nest, I have seen have no effect whatever. They will not allow the near approach of any larger bird with impunity, both birds unite to

drive off the intruder. I recollect of a pair which selected a large lime tree at Ednam, to build their nest in. A peacock had been in the habit of roosting in the same tree for several years, but after the Missel Thrushes took possession, there was no more peace for him; whenever he flew up to his old perch, both birds attacked him, alternately flying at his head. Their attacks were so persistent and well sustained, that he was ultimately forced to shift his quarters, although he seemed very loath to do so. Mr. Hardy, in last year's "Proceedings," says that this bird is called the "Feltysfleeer and Big Mavis in Berwickshire." In Roxburghshire and the adjoining parts of Berwickshire it is called the "Muzzle Thrush," and the Fieldfare is the "Feltysfleeer."

FOOD AND HABITS OF THE PEREGRINE.—To judge from the remains strewed about in the vicinity of the nests of these fine Falcons, which annually have their eyrie in the Bizzle, the young appear to be chiefly fed upon Wood Pigeons. There are also the remains of a few Black and Red Grouse, Golden, and Green Plovers, and Curlews, scattered about. Grouse and other birds bred near the haunts of the Peregrine, seem to have no fear of them. I saw a striking instance of this a few years ago, when crossing the spur of the hill (Cheviot) between Fleehope and the Bizzle. When about 200 yards from the Falcon's nest, (they had nearly full fledged young at the time), a Grayhen rose close to my feet; from the way in which she behaved, I thought there was a nest, and on looking carefully, I saw several young ones about the size of newly hatched chickens.

When the nest is approached the Falcons keep flying round and round above the intruders—the female usually lowest—all the time uttering shrill piercing screams. Sometimes they come close together, and immediately afterwards the male will dart downwards like an arrow to the bottom of the glen; he looks to all appearance as if he would be dashed to pieces, but when near the ground his headlong course is changed, and in an incredibly short space of time he is in his old position overhead, screaming as before.

COMMON MARTEN, (*Martes foina*).—From the following circumstance, it is not improbable that the Beech Marten still exists on the Borders. On July 6th, 1871, when standing above the rock in which the Falcons have their eyrie in the Bizzle, along with Mr Jones, (a student with Mr. Kay, at Linton Bankhead), an animal, which we at first thought was a young fox, came out from among the loose masses of rock below, and after running a short way up the glen, it began to ascend to the top of the slope, on the same side on which we were, and took right away in the direction of Henhole. When running up the side of the glen we had a fine side view of it; the *arching* back showed that it was

one of the weasels, the much longer and more bushy tail convinced us that it was neither a ferret nor a polecat, so that we were almost certain that it was a marten, most likely it was the Beech Marten, which according to Bell's "British Quadrupeds," is sometimes seen "on the sides of mountains or rocks,—from whence its names of Stone Marten, Stein Marder, *Martus Saxorum*,—where it chooses its retreat in any commodious fissures or excavations;" and again, "The female makes her nest generally in a hollow tree, but not unfrequently in holes in rocks, &c." Dr. Fleming, in his "British Animals," says of this, "In woods and rocks in the south of Scotland and England."

The Polecat, is, I believe, completely exterminated on the Borders, and its lesser relatives—the Weasel and the Stoat—are seldom seen. As they decrease, a much worse pest—the rats—increase.

On Two Welsh Prisoners confined at Bamburgh, in the reign of Edward I. By JAMES HARDY.

IN a notice of Chatton, at p. 52 of the present Volume, we have a translation of a deed of Edward I., relative to two Welshmen, Rees ap Maylgon and Conan ap Meredith, confined at Bamburgh; which, from the explanation attached being liable to mislead, requires correction. The deed is important in informing us of some of the uses to which the regal castles—Bamburgh amongst others—were put in the reign of Edward; and it makes us acquainted with some important state prisoners confined there, about whom we have hitherto been ignorant. It was surmised—for the Cymri excelled in the training of hawks and hounds—that these two persons might be attendants on the king, when engaged in hunting. This interpretation might also result from rendering "*robis ad opus*,"—"working dresses;" whereas it signifies here, "robes for the use of." Instead of being menials, as there suggested, they were influential personages, whom it suited the policy of Edward to retain in that stronghold, to prevent them from creating disturbances in their native country, and to punish them for their complicity in the great outbreak in Wales, of 1282, under the leadership of Prince Llewelyn ap Griffin, and his brother David.

Rees ap Maelgwyn was a chieftain of South Wales, who joined in this general rising. In Trivet's Annals, of the date 1281, we find Rees ap Mailgon and Griffin ap Mereduc in arms, in opposition to Edward; and they took the castle of "Lampedervaur," (Lampeter) a strong fortress which the king had erected, in 1277, to repress the invasions of the Welsh; and "many other castles," it is added, "were reduced in those parts by other Welsh nobles."* Stow, who had access to the records of John Peckham, Archbishop of Canterbury, who visited Wales on this occasion, to interpose his ineffectual efforts to conclude a peace between Edward and Llewelyn, also names these two chieftains as principals. "In the meantime Ryce the sonne of Maglon, and Griffyth ap Meredith ap Owen, with other noblemen of South Wales, took the castle of Aberistwith, the castle of Flint, of Ruthland; and divers other, spoyling the kings people that inhabited thereabouts."† Edward had built the first in 1277, the second in 1275, when he also strengthened the third.‡ The taking possession of the castle and town of Aberystwith, was properly the work of Rees ap Maelgwyn and Grufydd ap Meredydd. They burnt both.§ Rees afterwards took possession of the hundred of Penwedvy.|| Subsequently Cynan ap Meredith (brother of Grufydd ap Meredydd or Meredith) joined the movement, and assisted in taking forcible possession of Llandovery (Caermarthenshire) and Carreg Cennen castles.¶

The sons of Meredydd could not any longer endure the English encroachments on their privileges, and were forced to take arms to rid themselves of a reign of terror. This appears from the statement of grievances sent from Prince Llewelyn to the Archbishop of Canterbury.

"These be the greefes doone by the Englishmen to the sonnes of Meredyth ap Owen.

1. After that the King had granted the Gentelmen their own inheritance of Genewr-glyn (a hundred in which Aberystwith is situated) and Creuthyn, he, contrarie to the peace, disherited the

* Nic Triveti Annales, p. 305, Ed. T. Hog.

† Stow's Annals by Howes, p. 201. Powel's Hist. of Cambria, (1584), p. 337.

‡ Stow, p. 290

§ Hane's Cymru, p. 708.

|| Ibid.

¶ J. Williams' Hist. of Wales, p. 406. For the references to the works on Wales, I am indebted to Mr Edward Hamer, Abersychan, Pontypool, and Mr Richard Williams, Celynog, Newtown, Montgomeryshire.

said Gentlemen; denieing them all laws and customes of Wales, and of the countie of Caermardhyn.

2. The said King in his countie of Cardigan by his said Justices compelled the said Gentilmen to give judgement upon themselves; where their predecessors never suffered the like of Englishmen.

3 The said Justices of the King have taken awaie the courtes of the noblemen in Wales, and compelled the people to satisfie before them for trespasses; whenas they ought to have satisfied by the said nobles.

4. Where a wrecke hapneth upon anie of the grounds of the noblemen, whose ancestors had wrecke, they should have the same; yet the king forbiddeth them, and the said king by color of that shipwrecke contrarie to their custome and lawe did condemn them in eight marks, and broke away all the goods of the shipwrecke.

5. That none of our men of the countie of Cardigan dare come amongst the Englishmen, for fear of imprisonment; and if it had not been for feare of hurt, the nobles would never have stirred.”*

In 1282, Llewelyn was surprised and slain by the English. In 1283, David, brother of the Welsh Prince, was made captive, and executed as a traitor. “The capture of David led to the voluntary surrender of many chiefs of the insurrection, and Gruffydd and Cynan, sons of Meredyd, Rhys Vychan ab Rhys ab Maelgwn, Gryfydd and Llewelyn, sons of Rhys Vychan, and some other men of note, were sent to London and imprisoned in the Tower.”† Trivet in mentioning these circumstances, says: “On learning this, Rees Vauhan, (i.e. the Little,) the very noblest (nobilissimus Wallensium) of all the Welsh, surrendered to the Earl of Hereford, and being delivered to the king, was imprisoned in the Tower of London.‡ The similarity of Welsh names is so perplexing that I cannot undertake to “redd the marches,” between these two passages.

The period when Rees ap Maelgwn and Cynan ap Meredydd were removed to Bamburg, is not known, but they were there 16th Edw. I., 1288, five years after their imprisonment in the Tower. The evidence of this is a deed, a year older than the one quoted in the Club’s “Proceedings,” cited in Hartshorne’s “Feudal and Military Antiquities of Northumberland,” vol. ii., pp. 242–3.

* Powel’s Hist. of Cambria, p. 355.

† Williams’ Hist of Wales, p. 421.

‡ Trivet’s Annales, pp. 307, 308.

"In the 18th year of his (Edward's) reign, 1290, (Rot. Lib. 18 Edw. I., m. 6), he gave orders to Walter de Cambhowe, constable of Bamburgh, to expend 4*l.* on the robes of Resus ap Maylgon, and Conan ap Meredith, then incarcerated in this fortress, and 13*s.* 4*d.*, for the robes of a servant waiting upon them; being an allowance for the 16th (1288) and 17th (1289) years of his reign, of 2*l.* 6*s.* 8*d.* per year; or a sum of threepence a-day each for Rees and Conan, and twopence for their servant."

From a subsequent statement in the same documents, we can almost conjecture what was their fate. The irksomeness of confinement, and the climate of the bleak Northumbrian coast had become intolerable, and their health could no longer be maintained.

"To them this dungeon was a gulf
And fettered feet the worst of all."

"In the 24th year of Edward's reign (1296), Rees ap Maylgon and Conan ap Meredith were conducted to Newcastle-on-Tyne in a dying state, and on the 7th of June, from hence to London."

Miscellanea. By JAMES HARDY.

ZOOLOGICAL.

FOX'S ANTIPATHY TO JACKDAWS.—A Fox which frequented Siccar Point, in the beginning of May, took umbrage at the Jackdaws which nestle in the old rabbit holes, on the almost perpendicular sea-banks. It had killed two and buried them at separate spots; other two it had surprised on the adjacent field, and left exposed; while a fifth, after its head had been eaten off, was hid in a bunch of nettles. They had probably been rendering it too conspicuous by pursuing it like a thief, with cries and chatterings, when going forth to prey, or returning to its den, as I have often seen them do when a fox appeared among them.

SHEEP.—A shepherd informs me that Sheep are very fond of eating moor-fowl's dung, if they can come at it. This is surely a perversion of taste.

BOTTLENOSE.—Sometime in October, the newspapers recorded that a "whale," fourteen feet long, had come ashore at Burnmouth, near Berwick. I have ascertained that it was a Round-headed Porpoise, or Bottlenose (*Delphinus melas*). Drove of this animal pursue the herring shoals; and this individual had got stranded.

PEREGRINE FALCON, (*Falco peregrinus*).—One was seen in the

spring of 1875, at Lilburn Tower. I notice that wood pigeons are pretty numerous on that property, in the grass fields, and it may have come from the hills to prey on them.

KESTREL, (*Falco tinnunculus*).—About two pairs breed in the Lilburn Tower plantations. Like the Sparrow Hawk, they build in the old nest, which they clean out in spring. The gamekeeper has seen the Kestrel carry off a small weak pheasant.

SPARROW HAWK, (*Accipiter nisus*).—At Lilburn Tower, three or four pairs are native to the place; but about 20 or 30 may be shot every year.

COMMON BUZZARD, (*Buteo vulgaris*).—Mr Hughes wrote me, 27th October, 1875, that a few days previously, he observed a large Common Buzzard, hovering over the Sneer Hill, among the Cheviots.

BUZZARDS.—A Buzzard, species not ascertained, was shot at St. Abb's Head, on the 25th October, and sent to a Mr Armstrong, Edinburgh. Two others were seen on the same day.—(*Mr. Andrew Wilson*).

ROUGH-LEGGED BUZZARD, (*Buteo lagopus*).—11th November, 1875, the gamekeeper at Linden caught in a trap a Rough-legged Buzzard, which is preserved by Mr. Ames, the proprietor. Another was seen afterwards flying about the same place.—(*Mr. R. G. Bolam*).—In the end of December, 1875, the rabbit catcher at North Middleton saw two of these birds, one on each side of a green hillock, near the waterfall below Old Middleton. The place is frequented by rabbits. Their flight was heavy, like that of an owl. On the 25th December, Thomas Elliot, gamekeeper at Lilburn Tower, observed one which had just killed a rabbit. He baited a trap with a rabbit and watched, and it was soon after caught by the leg. It appeared to be a young bird. He kept it for some time, and then sent it to Lancashire.

HONEY BUZZARD, (*Pernis apivorus*).—More than four years ago, T. Elliot shot one at Middleton Hall, near Belford. It was engaged in turning up the ground above a nest of humble-bees.

GOSHAWK, (*Astur palumbarius*).—A very splendid specimen of the Goshawk was shot at Benwell, near Newcastle, last month. It was carrying a rook in its mouth. (*Rev. J. F. Bigge*, Feb. 3rd, 1876). At Lilburn Tower, T. Elliot, on January 16th, 1876, shot a young female bird of the first year, and has it stuffed. I examined the bird. Another was seen to clutch a partridge, and make off, and was still supposed to be on the ground in March.

SHORT-EARED OWL, (*Otus Brachyotus*).—One was trapped, Feb. 1876, at Lilburn Tower, in a pole trap. Part of the specimen is preserved.

RING-OUZEL, (*Turdus torquatus*).—There were still some Ring-ouzels in Langleyford vale on the 25th October, 1875. They linger there till the autumnal visitants appear.

SONG THRUSH AND FIELDFARES.—On the 25th October last, Thrushes were numerous along with Blackbirds, under the cover of withering ferns, in the middle portion of Langleyford vale. Farther up, among the pretty groves and clumps of birches, below the Hope, many of the Thrushes were congregated into small flocks, preparatory to migration. When a sparrow-hawk passed, they flew off in concert, and alighted among the trees in a body. I afterwards saw another large party flying across the open waste far up the water. At the same time there were present other birds of the kind in search of food among the dense beds of brackens, not connected with those gatherings, which may have been aliens. Keeping in separate companies, there were also on the open hills many Fieldfares, new arrivals. I found some fresh killed by hawks. Mr. Hughes wrote me, that about that period large assemblages of Fieldfares frequented the Cheviot Moors, as if collecting for dispersion elsewhere. At Oldcambus, December 2nd, during a frost, the local Thrushes formed a small scattered flock in a field near a plantation, where sheep had recently been pasturing; and for several days numerous Fieldfares and Starlings fed through among them, till a thaw enabled them to obtain food elsewhere. In former seasons, I have frequently observed, at the close of autumn, Thrushes flying in flocks on the moors above Redheugh. They took refuge at night in furze bushes.

BIRDS THAT DART INTO THE AIR AFTER FLIES.—The Wheatears on their first arrival here, April 16th, were repeatedly occupied leaping from eminences after passing insects. On May 3rd, Chaffinches were active and exultant in the woods, and at intervals giving chase to insects in the air; it is a familiar practice with both them and Sparrows to leap up after winter-gnats or moths. Two Whinchats, new arrivals, seated on a hedge, pursued this practice for some time, returning to the spot whence they rose. The Tree Pipit also from a fixed station, springs up after flies; and I have occasionally seen the Willow Wren hunting insects in this way. In autumn I remarked a Grey Wagtail making rushes along the ridge of a roof after the flies, which had settled on it; after the manner of its congener, the Pied Wagtail.

GRASSHOPPER WARBLER, (*Sylvia locustella*).—Agricultural occupancy of whinny banks, and grassy glades, sheltered by the grey willow, or birch or hazel, have probably diminished the number of native haunts of this shy summer visitant. In former times, at Penmanshiel, it was heard more frequently than now, in the little open spaces among the bushes, widening out to meadows; and I have several times seen the timid minstrel come forth on the margin of the thick grassy cover. Children are

accustomed to imitate its trill, by vibrating the closed under lip. It has occurred near Chirnside. On a few occasions I have heard it on Ewesdean Shank, opposite Lucken Arks Wood, among grassy openings surrounded with ferns. Dr. Turnbull notes it as being "rare" in East Lothian.

GREY WAGTAIL, (*Motacilla sulphurea*).—A few scattered birds pass the winter on the mountain streams, flowing from the Cheviots. On March 16th, 1876, I noticed three during a long walk from Coldgate Mill to Hell-path on the Caer burn; and a few days afterwards observed a pair sporting about the roof of Wooler Mill, and by the sides of the dam. The Lill burn is also a winter resort. Occasionally a bird or two may be seen in the Pease dean, during winter.

SKYLARK.—In the heavy snowstorm at the close of the year 1875, birds were reduced to great straits for a supply of food. On Dec. 20th, when the workers were picking up some turnips in a fold for the sheep, a Lark followed them throughout the whole afternoon. Their legs were wrapped with straw bands, and want had so tamed it, that it began picking at the straw; and having obtained two or three grains of oats, it evidently expected more by keeping behind them. When they stood it came up on their feet, and allowed itself to be stroked. They offered it crumbs, but it would not have them, but picked up whatever food the fresh turned-up earth revealed. I am informed that the Earl of Home's keeper, in 1875, observed a cream coloured Lark on Drakemire Moor, but he could never catch a sight of it afterwards.

BUNTING, (*Emberiza miliaria*).—Whatever may be the case elsewhere, Buntings are seldom seen in North Northumberland, during winter. On March 14th, 1876, I observed one at South Middleton, in a thorn hedge, associated with Yellow-hammers and Chaffinches.

BLACK-HEADED BUNTING, (*Emberiza schæniclus*).—A few, during severe winters, still frequent the stackyards on the higher farms. Now that the heaths and bogs are drained this bird has become extremely scarce. I see that a few in summer frequent the borders of Coldmartin Loch, near Wooler; also Woolerhaugh, near Earle; and on Doddington Hill, where they are called "Black-caps." In June I saw one or two of these birds at Easington Grange, near Belford.

CHAFFINCH, (*Fringilla cælebs*).—July 17th, I observed, in the garden, a female Chaffinch chasing a young Blackbird, which fled chattering in alarm, to escape being pecked.

BRAMBLING, (*Fringilla montifringilla*).—Mr Brotherston remarks in a letter: "I believe beech mast is the staple food of this bird. I have seen them feeding on it in the middle of April, when there

was no difficulty in getting other food. Some specimens that I obtained at that time, had the head nearly black, the grey ends of the feathers being rubbed off."

GREENFINCH, (*Coccothraustes chloris*).—On the 14th April, I noticed above a whinny bank, one either fixing on the site of its nest, or serenading its partner. It kept hovering in the air, with its gay wings spread out, or sailed round in a circuit; and then seated itself on a bush and uttered spree! spree! with apparent glee. Three days after, it continued sailing backwards and forwards over this centre of attraction, ejaculating a variety of notes, as well as its brief cheery song. About harvest it becomes very mischievous, among early ripening patches of corn; and is at all seasons a common bird.

SISKINS AND REDPOLES.—Siskins have been observed some years to frequent the old alder trees at the Pease Bridge; and also those at the sides of the Tower burn, near the Pease Mill. Mr Ferguson informs me that the gamekeeper at Dunse Castle sees Siskins in the plantations there throughout the season; so that there is a likelihood of some of them breeding there. Of date March 8th, 1876, Mr Ferguson thus writes: "The gamekeeper at Dunse Castle, tells me that, for several years past, he has seen almost daily during the winter months, a flock of from 20 to 30 Siskins—invariably accompanied by a like number of Redpoles—feeding on the fruit of some alders growing at the margin of a pretty large pond or "damhead" near his house. So far as he can judge, the number of males and females seems to be about equal. In the summer season they disappear; but he has more than once seen a solitary bird in the woods above Dunse Castle, and he is confident that a few pairs remain all the year through. If this be so, there can be no doubt that they breed about the place, although he has never succeeded in finding a nest. The Redpole is never seen except in winter." Mr Brotherston, writing March 14th, says: "We have the Siskin still here; I got a pair from Peatrig bog on the 9th. They are to be gotten there every winter." I was told, that in January, 1876, among the alders by the Lill burn, on Ilderton Moor, 24 Siskins were shot; a very unnecessary piece of cruelty, in order to obtain a few specimens to stuff. Redpoles, during winter often visit the birch woods near Penmanshiel, to feed on the birch seeds. They remain only for a short time.

CROSSBILL, (*Loxia curvirostra*).—Five or six years ago, Thomas Elliot, in Detchant Wood, killed 8 or 10, out of a flock of 40 or 50 Crossbills.

STARLING.—Starlings are as plentiful nesting in old decayed alders on the upper part of Lill burn, as in the Back Wood of Langleyford. There is no one to disturb them in that remote

situation. There was a general scream of alarm when I approached their seclusion. A shepherd boy who passing every day, was accustomed to the noise, calmly remarked, "Oh! its just the way o' them." In that neighbourhood they begin to collect the young in the tall hedges, about June 4th; and afterwards feed together in bands, which alight in heaps and spread outwards like a fan; this system of flight and dispersion, being constantly repeated. On Sept. 8th, I observed a female Starling leisurely walking along a wall top, and picking up the numerous insects that had alighted on it, previous to a shower coming on. Cats kill Starlings but do not eat them.

JAY, (*Garrulus glandarius*).—The Statistical Account of Cockburnspath and Oldcambus, when the Jay built in Penmanshiel Wood, is dated 1834. Considerably before that period, under the direction of gamekeepers, the number of "Jay Pyots" had become diminished, and the persecution lasted, till all were either trapped or shot. Occasionally, when a boy, I have seen living birds there; but more frequently they were suspended like felons to a cross-stick, with a nail through their heads. There have not been any there for well nigh thirty years. I was told, a few years since, that there are still a few Jays in the Whitfield and Press Woods.

GREAT SPOTTED WOODPECKER, (*Picus major*).—One was seen in summer, on the coast near Dunglass. It was clinging to a paling.

KING-FISHER, (*Alcedo ispido*).—One was shot in 1875 on the Lill burn; two were shot during winter 1874-5, at Wooler Bridge.

SAND MARTIN, (*Hirundo riparia*).—Mr S. H. Smith informed me, that he, on one occasion, took notice of a great commotion among some Sand Martins near Norham; and found it was owing to the presence of a weasel, which was perambulating the cliff, and examining nest after nest.

WOOD PIGEON, (*Columba palumbus*).—When at Melrose on May 12th, Mr John Freer mentioned that on the previous day he had shot six Wood Pigeons, as they were returning from some distance to the woods, and he found in their crops crumpled leaves and a brown substance. These proved to be beech leaves and their scaly covering. They had been cropped as the buds were expanding. On Heddin braes or Ilderton Hill, a most retired spot, I found Cushats nesting not 4 feet from the ground in low thorns, also in alders, and in juniper bushes, and even in thickets of wild roses. The Chaffinch had also built its nest in the lowly junipers. On June 5th, when proceeding to feed, they flew mostly in threes. On the 9th of July, at Penmanshiel, a band of Wood Pigeons set upon a thriving field of thinned Swedish Turnips, and stripped the leaves off in three days.

March 19th, I saw a pair of Cushats in a garden at Wooler, in full view of the window, cropping the tops of Cabbages, among the snow. They have been less numerous than usual this winter. Mr John Anderson mentions that, during the winter of 1874, a white Wood Pigeon was seen among a flock of Cushats at Lintlaw. There was another for two or three years among the woods on the Marigold hills, where it was a very conspicuous object, when sitting on the top of a lofty spruce fir, a place it seemed to delight in. Unfortunately in the spring of 1869, it was shot by a crowherd.

EGYPTIAN TURTLE DOVE, (*Turtur Senegalensis*).—Mr Clark has at Oldhamstocks Mails, a pair stuffed, of this very beautiful bird. He observed, five years since, just before Whitsunday, two of them feeding in a field, which was preparing for turnips. Of them he shot one, and next year two came, and he shot both, but one fell among growing corn, and was not recovered. They were, I am afraid, some one's domestic pets. Mr Gray, in "Birds of the West of Scotland," p. 223, refers to a specimen, evidently an escaped bird, which was shot at North Uist. This he now learns is referable to *T. Senegalensis* of Capt. Shelley's "Birds of Egypt," p. 218.

QUAIL, (*Coturnix vulgaris*).—Recently, Mr Clark informed me that Quails were not uncommon on Springfield farm, in the parish of Oldhamstocks, and that they breed there. In the summer evenings their call-note is a familiar sound coming from the grass and corn fields. Two nests have been cut over, while mowing hay; there were about twelve eggs in the nest; and these were large for the size of the bird, and much resembled those of the grouse. The birds arrive in May, and the impression is that their flight is from the north, and that they are passing southwards. They fly rapidly, skimming off like a swallow, and require to be shot at immediately they rise. They are occasionally shot in the partridge season; usually after the 7th October on that farm. This being late, several of the Quails may have then departed. In 1874, five or six birds were shot; in October 1875, two birds were started in a hedge between Braxton and Thurston. In the summer, one had been heard in a haugh on Cocklaw farm, near Oldhamstocks. Altogether, at least ten have been shot, within the last six years, on Springfield; and during that period they have frequented the place. The fields there rest on a raised platform; the soil is gravelly and dry, and lies well to the sun. On the 2nd week of September, 1874, one of the Dunglass gamekeepers, when shooting partridges, shot a Quail, at Whitburn on the Lammermoors. My friend Mr. Archibald Hepburn remarks that the Quail has long been a summer visitant in East Lothian, about Dirleton. Dr. Turnbull,

“Birds of East Lothian,” p. 22, says “it has frequently been seen in the parishes of Dirleton and Athelstaneford.” Some years since, during the partridge season, Mr Henry Collingwood shot two Quails, in the vicinity of Lilburn Tower

DOTTEREL, (*Charadrius morinellus*).—Dotterels frequent, although in less numbers than formerly, the heights of most of the upland farms in the east of Berwickshire, bordering the moors. Their favourite resort is old leas ploughed up, where there are clods and stones to protect the glittering beetles, that constitute their favourite food. They arrive about the 6th and 7th of May;—never before the 5th, says one. The flocks are never large, and the birds at first are easily approached. They have now become less wary, since they are not interfered with. Dotterels were once numerous at Penmanshiel, on the heights above Redheugh, Howpark, and Renton Bell. Again, on the west they frequented Ecklaw Hill, Blackburn Mill, and some of the high farms round Abbey St. Bathans. About two years since a small returning party of six or seven appeared in autumn, on Redheugh hill; out of which two brace were shot. Last season Mr. James Clark shot one on the farm of Springfield, and has it stuffed. They appear to be scarce near Belford. Some years since one was shot out of a flock of five or six, at Middleton Hall.

HERON, (*Ardea cinerea*).—Three years ago, on a flat spot among some dangerously steep rocks, near Siccar Point, a Heron's nest was come upon. The young ones had been deserted, after being nearly full grown. The nest was made of large sticks, and had many fish bones about it. Dr. Charles Stuart informs me, that he has discovered a heronry, with at least 50 nests, in the Pistol Plantation, Blackadder, situated due south from the forester's house on the Berwick turnpike.

REDSHANK, (*Totanus calidris*).—A cowardly, suspicious bird. When alarmed, head and neck continue to move up and down, while it keeps a listening attitude. If there is no danger apprehended, its agitation quiets down.

SANDPIPER, (*Totanus hypoleucos*).—The male when singing carries his wings elevated. On May, 25th, I saw them seeking food in pairs, sometimes wading into the streams. If one was left alone, it commenced plaining, like a forsaken child. On May 20th, I came upon a nest, below a heather bush, on a bank above the Coldgate Water, in Langleyford vale. It was a shallow depression, without any structure, among moss and fescue-grass, and about the size of the nest of a thrush. The eggs are larger than those of a missel thrush, reddish white, with brown blotches and dots. The startled bird shuffled along the ground, with its wings spread out, and every white patch on the tips of its tail feathers displayed; and it emitted a wheepling

cry. Then it stood up; and glided away towards the track of the stream. Next day, I came on another nest, with four eggs, among gravel, beneath a thicket of hazel and thorns. The bird again spread out its wings, and trailed its fan-shaped tail. There was more of a nest, which was constructed of leaves, and grass, and twigs. On April 29th, a pair was seen on the Blackadder, above Greenlaw; the first for the season.

SOLITARY SNIPE, (*Scolopax major*).—Six or seven years ago, I am informed, a Solitary Snipe was shot near Middleton Hall, Belford. It has been preserved.

WATER RAIL, (*Rallus aquaticus*).—One was killed December, 1875, in a ditch near Wooler Haugh Head, and has been preserved.

GOOSANDER, (*Mergus merganser*).—A female was shot near Longformacus, in the end of February, 1876, and was sent to Mr Robert Waite, Dunse, to be stuffed. On March 6th, Mr Brotherston had a male adult bird from St. Boswell's.

RED-NECKED GREBE, *Podiceps rubricollis*.—One was shot, 10th December, 1875, in the winter plumage, at the Harbour Pier, Coldingham shore, and is now in Mr Wilson's collection.

LITTLE AUK, *Mergulus melanoleucos*.—One was caught near Dunse, in November, in a very wasted condition.

RICHARDSON'S SKUA GULL, *Lestris Richardsons*.—A male and a female were shot at Coldingham Shore, in the winter of 1875, and are now in Mr A. Wilson's collection.

BLACK-HEADED GULL, (*Larus ridibundus*).—There is such a love of precision in the popular mind, that little allowance is made for seasons and circumstances. About the famous Pallinsburn Gull, the common opinion is that its return is true to a day in each year; and that it withdraws in like manner, for good and all at one fixed period. On this subject I have been favoured with a note from Mr Askew. "The Gulls," he says, "usually come here the first week in March, but do not remain at night for a fortnight or so—until the weather is spring-like. They remain till the young are on the wing—and depart one by one;—all having gone by the middle of July." I learn that some of the gulls have been shot on Wooler water during the winter, near Wooler Bridge. On March 11th, 1876, I observed four or five flying backwards and forwards over the water at Earle Mill; but they never returned during the subsequent snowy weather."

HOODIE v. SPARROW HAWK. Dr. Stuart, of Chirnside, writes Feb. 21st, 1876. "When driving along the Hutton Road the other day, I saw an animal in difficulties in an adjoining field. Three Hooded Crows had surrounded it, stepping up and giving it a peck in turn. I thought it might be a wounded hare or rab-

bit. On my approaching the object, the crows flew off to a safe distance, when to my surprise I found a Sparrowhawk with its talons grasping a newly killed partridge; so that the crows were in the most persistent manner, disputing possession of the game with the hawk; which had in turn to deliver up the coveted tit-bit to myself. I noticed that although the crows were most anxious for the prize, they did not attack simultaneously; but took it in turn to assault the hawk, which most reluctantly had to beat a retreat."

HOODIE, *v.* SHEPHERD'S DOG.—Mr John Ferguson writes, Mar. 8th, 1876. "When coming from Swinton the other day, I witnessed a rather amusing exhibition of pugnacity on the part of a common 'Hooded Crow,' (*Corvus cornix*), not far from Mount Pleasant. One of these birds was picking up some garbage from the road, when a shepherd's dog, which was passing at the time, halted quite close to it, and surveyed it for a minute with a puzzled and rather suspicious air. Whether the dog had never seen a pied crow before, and may therefore be presumed to have felt a scientific interest in the individual in question, or whether he had theftuous designs upon the crow's meal, is uncertain. The bird apparently came to the latter conclusion, for it speedily put itself in fighting attitude, and the dog, thinking no doubt, that in this case discretion was the better part of valour, immediately turned tail and scampered off. His plucky antagonist watched his retreat for a moment, and then, with a triumphant croak, took wing and quickly disappeared."

CECIDOMYIA PERSICARIAE, L.—The larva, which is found in the leaves of *Polygonum amphibium*, is orange coloured, and its presence occasions the margins of the leaves to roll inwards. Sometimes the roll is on both leaf-margins, and then the leaf acquires a fantastic twist, and looks as if contorted by a caterpillar. There are three or four larvæ in each roll. The rolls are pale green and crimson; making the affected leaves very conspicuous. I observed it at Turvielaws, Northumberland; at the side of the loch in Holy Island, in June; near Tynningham, and Beltonford, East Lothian, July 14th. Mr. Walker, Dipt. Brit. iii. p. 79, describes the fly from a German source, but it is questionable if the perfect insect has been observed in Britain. It is only one line long.

CECIDOMYIA TILLE, Schr. ?—This has a gall very different from the minute mite-gall infesting the leaves. It is oval, round, or oblong, pale green, or purple checked, smooth, of the size of a pea, or larger, situated on the twigs, chiefly those issuing from the main stem. The inside is fleshy or fibrous, and is occupied by colonies of slender orange spindle-shaped maggots, from ten to twenty in number. The maggot is scarcely a line long, puckered

along the edges, truncate behind, where it is trilobate, the middle lobe projecting. The mouth is indicated by a decided black spot; the two front spiracles are prominent like a pair of horns; the underside is roughish. When extracted it is very lively, rolls about, and leaps repeatedly. The oral hooks being caught in the anal lobe, a circle is produced, which snaps, and up it springs. I first observed it in Ladykirk Churchyard, June 28th; again in the manse garden at Cockburnspath; and a few days afterwards in Tynningham Woods. The gall-midge has not been described.

SIREX GIGAS.—An example of this fine insect was captured at Houndwood by Miss Coulson. It is the second instance for Berwickshire, and the fourth for the district.

HORNET, (*Vespa crabro*).—Mr. J. S. Dudgeon writes, that when shooting near Gordon in autumn, he noticed a Hornet, of which he was certain, from his acquaintance with it during a residence in the south of England. Wallis records it for Northumberland, but it is singular that it should evade the systematic observation of modern times.

SPHINX CONVULVULI.—I am indebted for a very fine specimen to the Rev. John Donaldson, who obtained it in September last, on the sea-banks near Cockburnspath Cove. I have another taken long ago near Renton. I saw a third at Oldhamstocks Mains, which was caught in 1874. It appears to have been widely dispersed during the present season.

RED UNDERWING MOTH, (*Catocala nupta*).—One was captured by Mr Alexander Cunningham, in a garden in Dunse.

LOCUST.—6th September, 1875. A very fine specimen of the true or travelling Locust was caught upon the farm of Swinhoe, near Chathill, by Mr. Milliken, the tenant. It was first observed by the workpeople in reaping a field of barley, and Mr. Milliken going afterwards to the spot where it had been seen, captured it, and the same evening when I happened to call at his house, handed it to me and it is now in my possession. I have heard before of instances stated of Locusts being caught upon the East coast, but this is the first specimen that I have seen. (*R. G. Bolam*).

BOTANICAL.

ORCHIS MASCULA.—White variety on Coldgate Haugh, and above Earle Mill.

CONVOLVULUS ARVENSIS.—In the Well-dean, Wooler; near Link-heads, East Lothian.

SILENE NOCTIFLORA.—In corn fields near Flodden.

CENTAUREA CYANUS.—In gravelly soil, at Mount Pleasant, near Crookham.

VERONICA BUXBAUMII.—A common weed at Easington Grange.

GERANIUM PUSILLUM.—This has probably been overlooked in gravelly and sandy situations. Below Wooler Bridge, and from the Bridge to the Brewery; between Old and New Yeavinger; near Doddington; near the town at Holy Island; near Stockbridge, Cockburnspath.

SILENE MARITIMA.—Cows are very fond of the Sea-Campion, risking themselves on the face of some very steep rocks to feed on it.

PHASCOM NITIDUM.—On mud thrown out of a ditch at Marygold. (*John Anderson*).

BRYUM JULACEUM.—On the farm of Primrose Hill. (*Ibid*).

LEUCODON SCIUROIDES.—On an old willow at Marygold. (*Ibid*).

HYPNUM POLYMORPHUM.—Near Edin's Hold. (*Ibid*).

On some of the Birds of Lauderdale. By Mr. ANDREW KELLY.

GOLDEN EAGLE, (*Aquila Chrysaetos*).—One morning, some thirty years ago, the shepherds of Earnsclough, in Lauderdale, were startled at seeing an Eagle dashing wildly about from hill-top to hill-top, and rushing down with violence on whatever prey that part of the Lammermoors afforded. Eventually, they perceived that its depredations were in a great measure confined to hares; and on one occasion they actually saw it snatch one up, that was pursued by some of their collies. Later, one of the shepherds by way of menace, cast up his bonnet at the bird; but to his surprise, the Eagle stooped and whisked it away to one of the neighbouring hills. It remained in the district for a fortnight, although frequently shot at.

OSPREY, (*Pandion haliaetus*).—The first remembered glimpse of an Osprey on the Leader, was obtained by Mr Simson, in 1867. It was steadying its wings at a streamy part of the river, at the old Crawha', and made a swoop, and then emerged, and hastened away northwards. Seven years later, I saw one at Newmills Bridge flying very low, not over seven or eight yards altitude; and before it was out of my sight, I had the pleasure of seeing it dash right into the water and extract a fish, as I supposed with its claws. Many years ago an Osprey was found drowned in the Gala, having its talons entangled in the back of a large fish.

SPARROW HAWK, (*Accipiter nisus*).—Mr Scott destroyed sixty of these birds last year; most of them being in search of his young pheasants. As such a number could not possibly have been bred in the district, it was thought that they might have been some migratory band, from the continent. In Lauderdale,

the average number of Sparrow Hawks' nests ranges from five to six. In the year under notice, there were only five nests, and the old birds belonging to them had been shot down. Still, hawks continued to be shot as usual; sometimes as many as three during a day. Query, why were these birds not nesting, when the others were?

HONEY BUZZARD, (*Pernis apivorus*).—Substitute this for *Buteo lagopus* at p. 301. The paragraph refers to the Honey Buzzard.

LONG-EARED OWL, (*Otus vulgaris*).—The following incident brings out certain features, unlooked for in this owl. In 1874, Thomas Riddell was standing in the Luggy plantation, holding in his hand a young owl of this species, which he had newly taken from its nest, to induce the old bird to come within shootable distance. In spite of the cries of the decoy, the old bird kept skimming about remotely, scarcely seeming to acknowledge her relationship, till in a moment, when he was least aware, she rushed upon him with such force, striking bill and claws deep into his cheek, that he thought some party had given him a blow with a stone, and he had barely time to shoot the horned fury to prevent a second attack.

GREY OR SPOTTED FLYCATCHER, (*Muscicapa grisola*).—This Flycatcher, in summer, constantly frequents the pleasure grounds of Thirlstane Castle. The artful creature sits as motionless as a stuffed bird, on some eminence, till some fly or giddy butterfly passes near. Then the stuffed bird leaps into life, its prey is unerringly seized; and ever faithful to its habits, the little morsel must be eaten on the perch, whence it darted off. It then resumes its stolid look, and patient waiting.

GOLDFINCH, (*Carduelis elegans*).—A flock, this season, selected the sunny braes of Old Thirlstane, for a visit. About the same period a flock of the Lesser Redpole frequented that locality.

SISKIN, (*Carduelis spinus*).—The Siskins so common about the banks of the Blackadder, and the neighbourhood of Dunse, are hardly to be met with in the lower vale of the Leader; and in the extreme north of it, about Lauder, they were altogether missing, till this winter, when they are more than ordinarily numerous for this kind of bird.

STARLING, (*Sturnus vulgaris*).—An out-house at Cleekhimin had long been a resort for Chimney Swallows, but has now come to be occupied by a company of Starlings. My new guests possess a faculty of mimicry, but are shy of exhibiting it, until after the period of incubation. Then their idle days seem to set in. Their most successful attempts are the notes which accompany the Peewit's aerial evolutions, and the call of the Whaup.

CARRION CROW, OR HOODIE, (*Corvus corone*).—With great foresight, these birds begin to nest early in spring, in order that their

young families may be forthcoming when other birds are laying their eggs in the hills around. These they readily scent out, and use up in detail ; for they require an enormous amount of egg-food for their young. To obtain these there is many a fight between the sable marauder and the rightful owner. When more advanced, the branchers are fed with young grouse, &c. ; and even weakly lambs are torn up for their support. At Broadshawrig, Mr Simson once counted upwards of three hundred egg-shells round a cairn of stones, opposite a Hoodie's nest. They purposely use such halting places, to keep their own retreat clear of suspicion. Last year I came upon a knoll similarly situated. It was perfectly littered with egg-shells, and amongst them—singularly enough—I observed those of the Kestrel hawk. Another peculiarity of the Hoodie is, that it seems to settle, not so much on the tops of trees, as on the lower branches, that it may the better peer about for nests ; in which pursuit its success is always better than it deserves.

CUCKOO, (*Cuculus canorus*).—Much has been said of the incubation of the Cuckoo, but little or nothing how the Meadow Pipits manage to feed their big nursling. I was talking to Mr Simson on the subject, and he told me that when he was living at Edgarnhope, a young Cuckoo happened to seat itself, for some time, on the low branch of a tree, near where he was herding. It was attended by Meadow Pipits, or as they are called here, Gray Cheepers, which were most assiduous in providing insects to support the hungry giant. He observed then, as he did on another occasion, that when they presented the Cuckoo with food, they momentarily alighted on its shoulder, until they had crammed it down its throat. It is still uncertain whether the Cuckoo drops only one egg during the season ; or so many single ones in as many nests, throughout a wide circuit. We would notice the constant recurrence of threes to almost every party of Cuckoos, after the period of incubation, as showing that the adoption by the Pipit has ceased, and that the young Cuckoo is now joined to its legitimate parents. I say parents, because I believe that the Cuckoo does pair, and also that the female, however she may wander, does not altogether leave the district to which her egg has been consigned.

WOOD PIGEON, (*Columba palumbus*).—It is nothing uncommon during summer, to meet with small parties of Cushats roughing it in glens and brae sides the most remote, where not a tree is to be seen to vary their little solitude ; yet here they are contentedly enjoying their lonesome life in little sweet nests among the blooming heather, or in the fine shingly sides of an empty burn. On the other hand, a dove-cot pigeon, some years ago, built her nest on the broad top of a spruce fir, in the Luggy plantation. The nest was run up with a few sticks, like her country cousin's ; but

after laying her eggs, she began to regret what she had done, and left them. Mr Scott gives me a sort of companion picture to this; namely, that he has seen a Wood Pigeon nest in a dove-cot.

The winter stock of East Lothian pigeons, so much insisted on as being overgrown, may be yearly augmented by those which come right over the hill from Berwickshire, as soon as severe weather sets in; for we have very few in Lauderdale during the winter. Like other birds they come back again in the spring to nest; there being unlimited accommodation among the spruce plantations covering almost every hill. March 5th, 1876.—The Wood Pigeons are arriving in great flocks, to take up their breeding quarters.

BLACK GAME, (*Tetrao tetrix*).—Of the Berwickshire precincts of Lauderdale, Black Game does not appear to have been an acknowledged occupant, till 1830; but appearances lead to the belief that it must have frequented much earlier the adjoining birch covers of Colmslie Hill (Roxburghshire); for it is rather the arborescent braes and glens far up among the hills, than high ranges of heather, that constitute a suitable domicile for the Black Cock. More like the pheasant than the grouse the Black Cock never pairs; and the female is left with all the cares of incubation, while the male is an idle rover with others of his associates. There have been three very striking varieties of the Black Cock noted in this part of Berwickshire; one almost white; another speckled; and the third with a white wing.

THE GREAT SNIPE, (*Scolopax major*).—This bird has been seen once or twice on the Leader about Thirlstane Castle; and in 1870 one was shot by Mr Scott, which I believe is still in the possession of Mr Tilly.

JACK SNIPE, (*Scolopax gallinula*).—The Jack Snipe is nearly as numerous, in our district, as the common species. This I ascertained by inspection of Mr Scott's game bag. Young birds have been frequently met with, in August, by Mr Scott and others, so that this is a breeding species with us.

WIGEON, (*Anas penelope*).—A flock of these ducks frequented an old water run of the Leader, between Newmills' ground and the Haugh—from the first till near the middle of October, when the party broke up. Afterwards, Mr Scott of Lauder, fell in with one of the divisions about Newbigging Upper Pond. He shot one, a fine duck, which was stuffed by Mr Darling. The crop was full of grass, *Poa annua*.

THE GOLDEN EYE, (*Fuligula clangula*).—One made its appearance in the mill-dam at Primrose Hill, and was literally hunted to death by the youngsters of the steading. I have never seen this duck in the Leader, or heard of its being shot in the vicinity.

List of the Rarer Birds seen or captured in the Hawick and Neighbouring Districts, mostly in 1875. By Sir WALTER ELLIOT, K.C.S.I., F.L.S., &c.

ROUGH-LEGGED BUZZARD, (*Buteo lagopus*).—The number of Buzzards seen this season has been considerable. The difficulty has been to identify the species. I believe most of them have been of the Rough-legged kind (*B. lagopus*). (1) One caught in a trap at Hislop, by Thomas Little, shepherd, in November; a female. (2) One shot by Mr John Ralfe, on the same farm; probably the male. (3) One caught by Job Simpson, keeper to Mr W. J. Pawson of Shawdon, at Ramshope Lodge, near Whitelee, on the 13th November. I sent to examine it, but it had gone to Bellingham to be preserved. (4) One caught in a rabbit trap at Bowhill on the 23rd November; a male. It was preserved by William Hope, in George Street, Edinburgh, and is in the possession of the Duke of Buccleugh. (5 and 6) One Buzzard was caught after being slightly winged, by Roger Parker, keeper at Stobbs Castle, which swooped several times at his small terrier. It is feathered to the toes, and is undoubtedly *B. lagopus*, and from its size, I should think, a female. It is still living in Hawick. Its mate also afterwards hovered for some days over the little dog, and got several shots, but none took effect. Parker saw another Buzzard (?) of a different species at Penchryse Pen, but failed to trap it. The following particulars were furnished by Thomas Hope, brother to William Hope, above mentioned. (7) One Rough-legged Buzzard was killed near Selkirk, 29th October; a female. (8) One female near Haddington, 27th October. (9, 10) Two, a male and a female near Stow, about the 29th October. (11) A male near Lockerbie, 9th November. (12) A female at the Glen, Peebles, about April 5th, 1876. (13, 14, 15, 16) Two females and one male killed in the Pentland Hills in November; and a male at Castle Howard in Cumberland, on the 1st April, 1876.

PEREGRINE FALCON, (*Falco peregrinus*).—A female was shot by Barnes, the keeper at Wells, on the west side of the Dunian, in the beginning of 1876. It has been stuffed by Hope of Jedburgh, and is now in possession of John Bald, Esq., at Wells. A pair were seen for some days about Ruberslaw and the Dunian, by Barnes, in December.

GREATER SHRIKE, (*Lanius excubitor*).—One shot near Bowhill, 8th March, 1876. Preserved by William Hope for the Duke of Buccleugh.

GOATSUCKER, (*Caprimulgus Europæus*).—One was killed at Wolfelee, in October last.

William Hope told me that an American Bittern (*Botaurus lentiginosus*), had been shot near Drumlanrig Castle on the 25th March, 1873; also a Common Buzzard (*Buteo vulgaris*), male, in October, 1873, very remarkable for its dark plumage; also a Fork-tailed Petrel (*Thalassidroma Leachii*), was picked up dead on the Roxburgh railway bridge, in October, 1873; all of which he preserved.

SKUA GULL, (*Lestris cataractes*).—One was shot in Oxnam Water in September, 1875, by W. Barrie, farmer at Harden Mains. It had pounced upon a duck in the pond, and was tearing it to pieces, when Barrie got his gun and shot it. I saw it when being preserved by Aaron Forrest, Gunsmith, Jedburgh. [This is the same bird that Mr Gray mentions, but there is an error in his notice, as to date.]

Donations to the Berwickshire Naturalists' Club, from Scientific Societies, &c., 1875.

BASEL, Switzerland. Ueber das Auftreten der Wanderheuschrecke am Ufer des Bielersee's, von Albert Muller in Basel. —Luzern, 1876. 8vo. *The Author.*

BATH. Proceedings of the Bath Natural History and Antiquarian Field Club, Vol. iii., No. 2. 1875. 8vo. *The Club.*

BELFAST. Annual Report and Proceedings of the Belfast Naturalists' Field Club. 1873-4. Series ii. Vol. i., Part 1. 1875. 8vo. *The Club.*

BOSTON, U.S.A. Proceedings of the Boston Society of Natural History, 1870. Vol. xiii., pp. 369-435 and title; 1870, Vol. xiii., pp. 1-224. Boston, 1871. 8vo. *The Society.*

———— Ditto, Vol. xvi., Parts iii. and iv. 1874. 8vo. *Ibid.*

———— Ditto, Vol. xvii., Parts i. and ii. 1874-5. 8vo. *Ibid.*

———— Jeffries Wyman: Memorial Meeting of the Boston Society of Natural History, Oct. 7th, 1874. 1874. 8vo. *Ibid.*

———— Memoirs of the Boston Society of Natural History, Vol. ii., Part iii., No. iii. Recent Changes of Level on the Coast of Maine; with reference to their origin and relation to other similar changes. By N. S. Shaler. 1874. 4to. *Ibid.*

———— Ditto, Vol. ii., Part iii., No. iv. The Species of the Lepidopterous Genus Pamphila. By Samuel H. Scudder. 1874. 4to. *Ibid.*

- Ditto, Vol. ii., Part iii., No. v. Antiquity of the Caverns, and Cavern Life of the Ohio Valley. By N. S. Shaler, 1875. 4to. *Ibid.*
- Ditto, Vol. ii., Part iv., No. i. Prodrôme of a Monograph of the Tabanidæ of the United States, Part i. By C. R. Osten-Sacken. 1875. 4to. *Ibid.*
- BREMEN. Abhandlungen herausgeben vom Naturwissenschaftlichen Vereine zu Bremen, iii., Bd., iv. Heft. 1873. 8vo. *The Society.*
- Ditto, iv., Bd., i. and ii. Heft. 1874. *Ibid.*
- Ditto, Weather-Tables, 1872-3. 4to. *Ibid.*
- CAMBRIDGE, MASS. U.S.A. Annual Report of the Museum of Comparative Zoology at Harvard College, in Cambridge, for 1874, 1875. Boston, 1875, 1876. 8vo. *From the Museum.*
- EDINBURGH. Proceedings of the Royal Physical Society of Edinburgh. Session, 1874-5. 1875. 8vo. *The Society.*
- GLASGOW. Proceedings of the Natural History Society of Glasgow. Vol. ii., Part i. 1875. 8vo. *The Society.*
- HAWICK. Proceedings of the Hawick Archæological Society, 1875. 1875. 4to. *The Society.*
- LIVERPOOL. Proceedings of the Literary and Philosophical Society of Liverpool. No. xxix. 1875. 8vo. *The Society.*
- LONDON. Proceedings of the Geological Association, Vol. iv., Nos. i., ii., iii., iv., v., vi. 1875-6. 8vo. *The Association.*
- Annual Report of Do. 1876. 8vo. *Ibid.*
- Journal of the Anthropological Institute of Great Britain and Ireland, July, 1875, Vol. v., No. i.; January, 1876, Vol. v., No. iii.; and April, 1876, Vol. v., No., iv. 1875-6. 8vo. *The Institute.*
- NEWCASTLE. Natural History Transactions of Northumberland and Durham, Vol. v., Part ii. *The Natural History Society of Northumberland and Durham.*
- PLYMOUTH. Annual Report and Transactions of the Plymouth Institution, and Devon and Cornwall Natural History Society, Vol. v., Part ii., 1874-5. 1874. 8vo. *The Institution.*
- WASHINGTON, U.S.A. Annual Report of the Board of Regent's of the Smithsonian Institution, for 1873. Washington, 1874. 8vo. *Smithsonian Institution.*
- Ibid for 1874. Ibid, 1875. 8vo. *Ibid.*
- Coues' [Dr. Elliott] Birds of the North West : a Handbook of the Ornithology of the Region drained by the Missouri River and its Tributaries. Ibid, 1874. 8vo. *Dr. F. V. Hayden of the U.S. Geological Survey.*
- Some Account of *Tapus Hudsonius* and *Lagopus Leucurus*. Ibid, 1875. 8vo. *Ibid.*
- An Account of the Publications relating to the Travels

of Lewis and Clarke, and the Zoological Results of the Expedition. *Ibid.*, 1876. 8vo. *Ibid.*

———— Gannett [Henry], Lists of Elevations principally in that portion of the United States, west of the Mississippi River. 3rd Edition. *Ibid.*, 1875. 8vo. *Ibid.*

———— Catalogue of the Publication of the United States Survey of the Territories. *Ibid.*, 1874. 8vo. *Ibid.*

———— Lesquereux [Leo], Contributions to the Fossil Flora of the Western Territories. [Geological Survey of the Territories]. Part i. The Cretaceous Flora. *Ibid.*, 1874. 8vo. *Ibid.*

———— Cope [E. D.] The Vertebrata of the Cretaceous Formations of the West. [Geological Survey of the Territories]. *Ibid.*, 1875. 4to. *Ibid.*

———— Abstract of Results of a study of the Genera *Geomys* and *Thomomys*; with Addenda on the the Osteology of *Geomyzidæ*, and on the Habits of *Geomys Tuza*. By Dr. Elliott Coues, U.S. Army. *Ibid.*, 1875. 4to.

From the Department of the Interior.

———— Report of the Commissioner of Agriculture for the Year 1873. *Ibid.*, 1874. 8vo. *Ibid.*

WELSHPOOL. Collections, Historical and Archæological, relating to Montgomeryshire and its Borders, issued by the Powys-land Club, Vol. viii., in 3 parts. London, 1875. 8vo.

From the Powys-land Club.

———— *Ibid.*, Vol., ix., No. *Ibid.*, i. 1876. 8vo. *Ibid.*

———— *Ibid.* Domesday Book of Montgomeryshire. *Ibid.*, 1876. *Ibid.*

General Statement.

The INCOME and EXPENDITURE have been :—

Balance from last year.....	28	17	0½
Arrears received	10	4	0
Entrance Fees	7	10	0
Subscriptions	52	10	0

£99 1 0½

EXPENDITURE.

Printing and Engraving	62	16	0
Expenses at Meetings	6	2	9
Postage and Carriage	10	5	1
Berwick Salmon Company	4	3	6

83 7 4

Balance in hand..... 15 13 8½

£99 1 0½

2 0

Rain Fall at Glanton Pike, Northumberland, in 1875,
communicated by FREDK. J. W. COLLINGWOOD, Esq.; *and*
at Lilburn Tower, Northumberland: communicated by
EDWARD J. COLLINGWOOD, Esq.

GLANTON PIKE.		LILBURN TOWER.	
	Inches.		Inches.
January	- 3·29'0.	January	- 1·862
February	- 1·85'0.	February	- 3·179
March	- 1·19'5.	March	- 1·213
April	- 1·29'0.	April	- 1·968
May	- 1·80'5.	May	- 1·110
June	- 1·80'5.	June	- 2·755
July	- 2·00'5.	July	- 1·616
August	- 1·43'5.	August	- 1·545
September	- 3·00'0.	September	- 2·265
October	- 5·58'0.	October	- 3·806
November	- 6·21'5.	November	- 4·641
December	- 2·39'0.	December	- 2·892
<hr/>		<hr/>	
Total	- 31·86'0	Total	- 28·852
Rain Gauge—Diameter of Funnel, 8in.; Height of Top above Ground, 4 ft. 3½ in.; above Sea Level, 517 ft.		Rain Gauge—Diameter of Funnel, 10in. square; Height of Top above Ground, 6 ft.; above Sea Level, 300 ft.	

Rain Fall at Stamfordham Vicarage, Northumberland, in 1875, communicated by the Rev. JOHN F. BIGGE.

	Inches.
January	- 3·30
February	- 1·71
March	- 0·46
April	- 0·71
May	- 0·76
June	- 1·88
July	- 3·74
August	- 2·19
September	- 3·49
October	- 5·21
November	- 5·23
December	- 1·61
<hr/>	
Total	- 30·29

Rain Gauge—Diameter of Funnel, 8 in.; Height of Top above Ground, 1 ft.; above Sea Level, 400 ft.

Register of Rain Fall and Temperature in 1875, at Longnewton Place, St. Boswells, Roxburghshire.
 Time of observation 8.30 a.m. Rain Gauge above Ground, 9 in.; above Sea Level, 476.
 Communicated by JOHN SCOTT DUDGEON, Esq.

RAIN FALL.			TEMPERATURE.			
Month.	Total Depth.	Greatest Fall in 24 hours	Mean of Month. at 8 30 a.m.	Highest Marking at 8 30 a.m.		Lowest Marking in previous 24 hours.
	Inches.	Depth.	Degrees.	Degrees.	Date.	Degrees. Date.
January -	2.27	.50	36½	47	19th	10 1st
February	0.78	.25	*			
March -	0.99	.91	35½	44	26th. and 31st	26 5th
April -	.57	.25	43¼	55	29th	33 5th, 13th, & 24th
May -	1.00	.27	52½	60	14th	37 17th
June -	1.79	.44	55	61	29th	40 1st
July -	3.61	.77	57¾	64	20th	42 26th
August -	2.12	.42	57½	62	11th, 22nd, & 23rd	45 31st
September	2.37	.67	52½	60	2nd, 3rd, and 8th	39 29th
October -	1.77	.46	43	53	1st and 8th	30 12th
November	2.63	.56	36¼	49	4th	26 9th
December	2.05	26	40	45	24th and 30th	32 28th
	21.95	6.46	†			

* From home much during month, so unable to report

† Observations in December recorded only from 16th to 31st.

For the sake of comparison, I append Statements of Rain Fall of 1875, at four different stations in the neighbourhood of Longnewton Place, which have appeared in the local prints. Riddleton Hill, is about four miles to the north east; Jedburgh six miles to the south east; Melrose five miles to the north west; and Galashiels about four miles further in a like direction.

RAIN FALL 1875.

	Riddleton Hill.	Jedburgh.	Melrose.	Galashiels.
January -	2.45	2.54	3.76	4.25
February -	.82	.74	1.49	1.44
March -	.96	.88	1.33	1.37
April -	.65	1.06	.72	.68
May -	1.00	1.36	1.55	1.48
June -	2.12	2.19	3.25	2.87
July -	3.51	3.13	3.15	2.90
August -	2.06	2.19	2.19	1.65
September -	2.85	2.64	3.30	4.46
October -	2.37	2.15	3.26	4.47
November -	3.51	3.95	4.35	4.98
December -	2.18	1.65	2.07	2.74
	24.58	24.48	30.42	33.29

Places of Meeting for the Year 1876 :—

Dunbar	...	...	Wednesday,	May 17.
Selkirk	...	...	"	June 28.
Norham and Horncliffe	...	...	"	July 26.
Rothbury	...	...	"	Aug. 30.
Dunse	...	...	"	Sept. 27.

BERWICKSHIRE NATURALISTS' CLUB.

LIST OF MEMBERS, DECEMBER 31, 1875.

	Date of Admission.
1. Robert C. Embleton, Beadnell, Chathill	Sept. 22, 1831.
2. Francis Douglas, M.D., Woodside, Kelso	July 30, 1834.
3. David Milne Home, F.R.S.E., LL.D., &c., Paxton House, Berwick, and 10, York Place, Edinburgh ..	Sept. 21, 1836.
4. Frederick J. W. Collingwood, Glanton Pyke, Alnwick	May 6, 1840.
5. Jonathan Melrose, Coldstream	" "
6. David Macbeath, Old Charlton, Kent	Dec. 16, "
7. John B. Boyd, Cherrytrees, Yetholm	Sept. 18, 1841.
8. James Tait, W.S., Edenside, Kelso	July 26, 1843.
9. William Brodrick, Little Hill, Chudleigh, South Devon	Sept. 20, "
10. John Turnbull, 58, Frederick Street, Edinburgh ..	" "
11. Ralph Carr-Ellison, Dunstan Hill, Gateshead ..	Oct. 18, "
12. Henry K. Gregson, Lowlyn, Beal	May 3, 1846.
13. Rev. Hugh Evans, Scremerston, Berwick	" "
14. Rev. William Lamb, Ednam, Kelso	June 3, "
15. The Right Hon. the Earl of Home, Hirsell, Coldstream, and 6, Grosvenor Square, London, W.	Oct. 20, 1847.
16. Robert Hood, M.D., 5, Salisbury Road, Newington, Edinburgh	May 3, 1848.
17. Rev. Samuel Arnott Fyler, Cornhill	June 25, 1849.
18. Rev. William Darnell, Bamburgh	" "
19. David Francis S. Cahill, M.D., Berwick	Oct. 18, "
20. William H. Logan, 25, Royal Circus, Edinburgh ..	May 1, 1850.
21. John Craster, Craster Tower, Bilton	Sept. 18, "
22. William Dickson, Sea-bank House, Alnmouth ..	Oct. 15, 1851.
23. Matthew J. Turnbull, M.D., Coldstream	June 30, 1852.
24. Sir John Majoribanks, Bart., Lees, Coldstream ..	" "
25. Rev. George Selby Thomson, Acklington	" "
26. William Stevenson, Dunse	Sept. 7, 1853.
27. William B. Boyd, Ormiston House, Kelso	Oct. 12, "
28. Charles Stuart, M.D., Chirnside	Aug. 16, 1854.
29. Rev. F. R. Simpson, North Sunderland, Chathill ..	" "
30. The Ven. Archdeacon George Hans Hamilton, Eglingsham, Alnwick	Oct. 25, "
31. Charles Rea, Doddington, Wooler	June 23, "
32. George Culley, Fowberry Tower, Belford	" "
33. William Marjoribanks, Lees, Coldstream	" "
34. Rev. Charles Thorp, Ellingham, Chathill	Jan. 31, 1856.
35. Charles Watson, Dunse	Oct. 29, "
36. Rev. Thomas Leishman, D.D., Linton, Kelso ..	" "
37. George P. Hughes, Middleton Hall, Wooler	" "

	Date of Admission.
38. Frederick R. Wilson, Alnwick	June 25, 1857.
39. Sir Dudley Coutts Marjoribanks, M.P., Upper Brook Street, Park Lane, London	July 30, "
40. Patrick Thorp Dickson, 50, Doughty Street, London, W.C.	Oct. 28, "
41. William Sherwin, Ixworth Abbey, Bury St. Edmunds	" "
42. Rev. Thomas Procter, Tweedmouth	" "
43. Matthew T. Culley, Coupland Castle, Wooler	" "
44. John Clay, Berwick	" "
45. Rev. J. W. Dunn, Warkworth	" "
46. Rev. William Cumby, Beadnell, Chathill	" "
47. Rev. William Procter, Doddington, Wooler	" "
48. John Marshall, M.D., Chatton Park, Belford	June 24, 1858.
49. James Robson Scott, M.D., Scotch Belford, Yetholm, and 27, Abercromby Place Edinburgh	" "
50. Rev. John H. Walker, Greenlaw	Sept. 22, "
51. John Stuart, LL.D., F.S.A., Scot., M.R.I.A., General Register House, Edinburgh	Oct. 27, "
52. John Wheldon, 58, Great Queen Street, Lincoln's Inn Fields, London, W.C.	" "
53. Middleton H. Dand, Hauxley Hall, Acklington	June 28, 1859.
54. Rev. Aislabie Procter, Alwinton, Morpeth	" "
55. Stephen Sanderson, Berwick	" "
56. James Maidment, 25, Royal Circus, Edinburgh	" "
57. Dennis Embleton, M.D., Newcastle	" "
58. Charles B. Pulleine Bosanquet, Rock, Alnwick	Sept. 29, "
59. Rev. John S. Green, Wooler	May 31, 1860.
60. Robert Douglas, Berwick	June 28, "
61. Rev John Irwin, Hurworth-on-Tees, Darlington	Sept. 13, "
62. John Riddell, St. Ninian's, Wooler	" "
63. Watson Askew, Pallinsburn, Coldstream	Oct. 11, "
64. Rev. Edward A. Wilkinson, Tudhoe Vicarage, Spenny- moor, Durham	May 30, 1861.
65. Robert Clay, M.D., 4, Windsor Villas, Plymouth	" "
66. William M. Mackenzie, M.D., Kelso	June 27, "
67. J. A. H. Murray, LL.D., Mill Hill, Hendon, Middlesex, N.W.	" "
68. Charles Douglas, M.D., Woodside, Kelso	" "
69. Archibald Campbell Swinton, LL.D., F.R.S.E., Kim- merghame, Dunse	" "
70. Rev. Patrick G. McDouall, Kirknewton, Wooler	July 25, "
71. Thomas Brewis (of Eshott), 19, George Square, Edin- burgh	" "
72. Rev. W. L. J. Cooley, Rennington, Alnwick	" "
73. Rev. William Greenwell, F.S.A., Durham	" "
74. Richard Hodgson Huntley, Carham Hall, Coldstream	Aug. 29, "
75. Sir George H. Scott-Douglas, Bart., M.P., Springwood Park, Kelso; and 12, Petersham Terrace, London	" "
76. William Cunningham, Coldstream	Sept. 26, "
77. Thomas Friar, Grindon Ridge, Norham	" "
78. William Wightman, Bank, Wooler	" "
79. James Bowhill, Ayton	" "
80. Rev. John Scarth, Holy Trinity Vicarage, Milton-next- Gravesend	" "
81. Septimus H. Smith, Norham	" "
82. John Paxton, Norham	" "

			Date of Admission.	
83.	Charles Anderson, Jedburgh .. ..	..	June 26,	1862.
84.	Capt. Henry R. Hardie, 4, Stanhope Terrace, Hyde Park Gardens, London, W. .. ..	..	"	"
85.	John Scott Dudgeon, Longnewton Place, St. Boswells .. ..	..	"	"
86.	William Elliot, Jedburgh .. ..	..	"	"
87.	James Tait, Highridge Hall, Kelso .. ..	..	"	"
88.	Rev. J. C. Bruce, LL D., Framlingham Place, Newcastle .. ..	..	July 31,	"
89.	John Tate, Barnhill, Acklington .. ..	..	"	"
90.	Robert Crossman, Cheswick House, Beal .. ..	..	"	"
91.	Rev. Peter Mearns, Coldstream .. ..	..	"	"
92.	Alexander Brown, M.D., Coldstream .. ..	..	"	"
93.	William Crawford, Dunse .. ..	..	Aug. 15,	"
94.	George Rea, Middleton House, Alnwick .. ..	..	" 28,	"
95.	Sir Walter Elliot, K.C.S.I., F.L.S., Wolfelee, Hawick .. ..	..	June 25,	1863.
96.	John Ord, Nisbet, Kelso .. ..	..	"	"
97.	William Dickson, Wellfield, Hawick .. ..	..	"	"
98.	Thomas Robertson, Alnwick .. ..	..	"	"
99.	Alexander Curle, Melrose .. ..	..	"	"
100.	John Edmund Friar, Grindon Ridge, Norham .. ..	..	"	"
101.	William Chartres, Newcastle .. ..	..	"	"
102.	Francis Russell, Sheriff Substitute, Jed-bank, Jedburgh .. ..	..	"	"
103.	William Hilton Dyer Longstaffe, F.S.A., Gateshead .. ..	..	"	"
104.	Robert Middlemas, Alnwick .. ..	..	"	"
105.	James Hardy, Oldcambus, Cockburnspath .. ..	..	"	"
106.	Rev. Edward L. Marrett, Lesbury, Bilton .. ..	..	July 30,	"
107.	Thomas Clutterbuck, Warkworth .. ..	..	"	"
108.	Thomas Tate, Alnwick .. ..	..	"	"
109.	Rev. Adam Davidson, Yetholm .. ..	..	"	"
110.	Lord Henry Ker, Huntly Burn, Melrose .. ..	..	"	"
111.	Robert Brown, Littlehoughton, Chathill .. ..	..	Sept. 29,	"
112.	Rev. John F. Bigge Stamfordham, Newcastle .. ..	..	May 26,	1864.
113.	Edward Allen, Alnwick .. ..	..	"	"
114.	Christopher S. Bell, Stanwick, Darlington .. ..	..	Sept. 29,	"
115.	Robert Wilson, M.D., Alnwick .. ..	..	"	"
116.	J. Towlerton Leather, F.S.A., Middleton Hall, Belford .. ..	..	"	"
117.	Ralph Forster, Castle-hills, Berwick .. ..	..	May 25,	1865.
118.	Colville Brown, M.D., Berwick .. ..	..	"	"
119.	Rev. James Farquharson, Selkirk .. ..	..	June 29,	"
120.	Henry Richardson, M.D., R.N., Beal .. ..	..	"	"
121.	Thomas Allan, Horncliffe House, Berwick .. ..	..	"	"
122.	William Henderson, Fowberry Mains, Belford .. ..	..	"	"
123.	Frederick Lewis Roy, Nenthorn, Kelso .. ..	..	July 27,	"
124.	William Watson Campbell, M.D., Dunse .. ..	..	"	"
125.	G. Sholto Douglas, Riddleton Hill, St. Boswells .. ..	..	Aug. 31,	"
126.	Robert Carr Fluker, M.D., Berwick .. ..	..	May 31,	1866.
127.	Lieut.-Colonel J. P. Briggs, Bonjedward House, Jedburgh .. ..	..	July 26,	"
128.	James Smail, Galashiels .. ..	..	"	"
129.	Rev. Dugald Macalister, Stitchell, Kelso .. ..	..	"	"
130.	Rev. Manners Hamilton Graham, Maxton, St Boswells .. ..	..	Aug. 30,	"
131.	Andrew Wilson, Coldingham .. ..	..	Sept. 27,	"
132.	J. R. Appleton, F.S.A., Western Hill, Durham .. ..	..	Sept. 26,	1867.
133.	Rev. Peter McKerron, Kelso .. ..	..	"	"
134.	Alexander Dewar, M.D., Melrose .. ..	..	"	"
135.	William Currie, Linthill, St. Boswells .. ..	..	"	"
136.	William Blair, M.D., Jedburgh .. ..	..	"	"

	Date of Admission
137. Major the Hon. R. Baillie Hamilton, M.P., Langton House, Dunse; and 51, Brook Street, London, W. ..	Sept. 26, 1867.
138. Alex. Hay Borthwick, St. Dunstan's Villa, Melrose ..	" "
139. Rev. G. P. MacMorland, Minto, Hawick ..	" "
140. His Grace the Duke of Northumberland, Alnwick Castle ..	June 25, 1868.
141. Robert G. Bolam, Weetwood Hall, Belford ..	Sept. 25, "
142. Rev. J. Elphinstone Elliot, Whalton, Morpeth ..	" "
143. Henry Hunter, Alnwick ..	" "
144. James Brunton, Broomlands, Kelso ..	" "
145. Charles Bertram Black, 38, Drummond Place, Edinburgh ..	" "
146. Captain James F. Macpherson, Melrose ..	" "
147. Francis Holland, Alnwick ..	" "
148. James Heatley, Alnwick ..	" "
149. C. H. Cadogan, Alnmouth ..	" "
150. Henry Wentworth Acland, M.D., Regius Professor of Medicine, Oxford ..	" "
151. Robert Romanes, Harryburn, Lauder ..	Sept. 30, 1869.
152. William B. Robertson, Lauder ..	" "
153. Thomas Broomfield, Lauder ..	" "
154. John Brown, Halidean Mill, Melrose ..	" "
155. John Bolam, Alnwick ..	" "
156. Rev. William J. Meggison, South Charlton, Alnwick ..	" "
157. John Dunlop, Berwick ..	Sept. 29, 1870.
158. Pringle Hughes, Middleton Hall, Wooler ..	" "
159. David C. McVail, 27, Great Western Road, Glasgow ..	" "
160. Rev. James Noble, Castleton Manse, Newcastleton, Carlisle ..	" "
161. James Purves, Berwick ..	" "
162. George L. Paulin, Berwick ..	" "
163. Rev. David Paul, Roxburgh, Kelso ..	" "
164. Thomas Patrick, Berwick ..	" "
165. Rev. John George Rowe, Vicar, Berwick ..	" "
166. John Scott, Berwick ..	" "
167. Captain Simpson, North Sunderland ..	" "
168. John Pringle Turnbull, Alnwick ..	" "
169. Rev. E. B. Trotter, St. Michael's Vicarage, Alnwick ..	" "
170. James Wood, Galashiels ..	" "
171. George Young, Berwick ..	" "
172. Matthew Young, Berwick ..	" "
173. Rev. Thomas Brown, F.R.S.E., 16, Carlton Street, Edinburgh ..	May 11, 1871.
174. Rev. Thomas F. Johnstone, St. Boswell's ..	Sept 26, "
175. Rev. Thomas Rogers, Durham ..	" "
176. Rev. Robert Paul, Coldstream ..	" "
177. Francis Walker, Campton, Haddington ..	" "
178. Rev. T. S. Anderson, Crailing, Kelso ..	" "
179. Rev. David W. Yair, 4, Albert's Drive, Crosshill, Glasgow ..	" "
180. John Philipson, Victoria Square, Newcastle ..	" "
181. Rev. Ambrose Jones, Stannington, Cramlington ..	" "
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188. Rev. John Dixon Hepple, Branxton, Cornhill ..	Sept. 26, 1871.
189. Thomas Arkle, Highlaws, Morpeth ..	Sept. 26, 1872.
190. Adam Deas, Dunse ..	" "
191. James T. S. Doughty, Ayton ..	" "
192. Captain J. Carr-Ellison, Hedgeley, Alnwick ..	" "
193. W. T. Hindmarsh, Alnwick ..	" "
194. Rev. Robert Home, Swinton, Coldstream ..	" "
195. Major James Paton, Hundalee Cottage, Jedburgh ..	" "
196. Henry A. Paynter, Alnwick ..	" "
197. E. A. Storer, North Eastern Bank, Alnwick ..	" "
198. Captain Thompson, Walworth Hall, Darlington ..	" "
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200. Rev. Evans Rutter, Spittal, Berwick ..	Sept. 25, "
201. Rev. Hastings M. Neville, Ford Rectory, Cornhill ..	" "
202. Rev. James Henderson, Ancroft, Beal ..	" "
203. Professor A. Freire Marreco, Neville Hall, Newcastle ..	" "
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206. Rev. William Stobbs, Gordon ..	" "
207. William Allan Jamieson, M.B., Berwick ..	" "
208. James Nicholson, Murton, Berwick ..	" "
209. Rev. Joseph Waite, Vicarage, Norham ..	" "
210. Rev. Beverley S. Wilson, Duddo, Norham ..	Sept. 24, 1874.
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226. Samuel Grierson, M.D., District Asylum, Melrose ..	" "
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228. Alfred Knight Gregson, Lowlyn, Beal ..	" "
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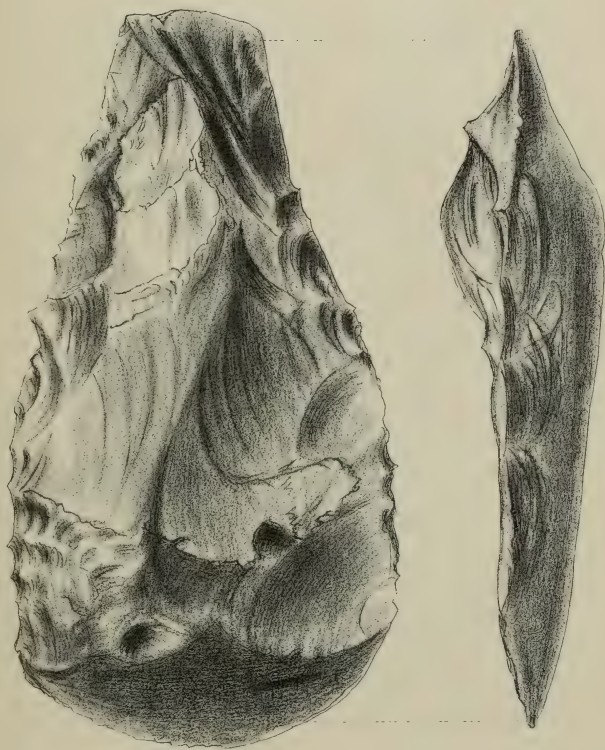
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ERRATA.

- PAGE 31, line 41, for "*Hildenbranchia*," read "*Hildenbrandtia*."
 ,, 47, col. 1, line 31, for "*Buccinuom*," read "*Buccinum*."
 ,, 48, col. 2, line 24, for "*Laomedia*," read "*Laomedea*."
 ,, " line 34, for "*Stenorynchus*," read "*Stenorhynchus*."
 ,, 51, col. 2, line 30, for "*verticellatus*," read "*verticillatus*."
 ,, 158, line 23, for "*Scadder*," read "*Scudder*."
 ,, 201, line 20, for "*Naopolitan*," read "*Neapolitan*,"
 ,, 260, last line, for "*north*," read "*Forth*,"
 ,, 320, line 7, for "*Clerk*," read "*Clerck*."
 ,, 323, line 25, for "*Clubiona fusca*," read "*C. grisea*."
 ,, " line 2 from bottom, for "*C. courta*," read "*C. comta*."
 ,, 367, line 22, for "*latifolia*," read "*latifolia*."
 ,, 400, last line of the text, for "*1851*," read "*1751*."
 ,, 422, line 20, after "*or*" delete "*on*."
 ,, 427, line 18, for "*visar*," read "*vicar*."
 ,, 443, line 25, for "*1373*," read "*1353*." The error is in the MS.

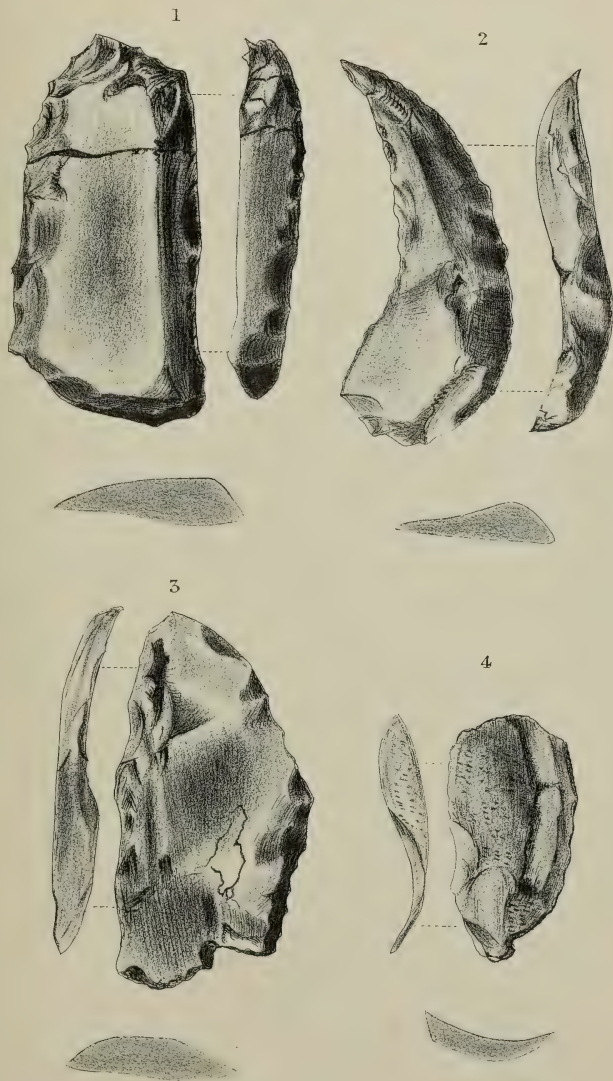




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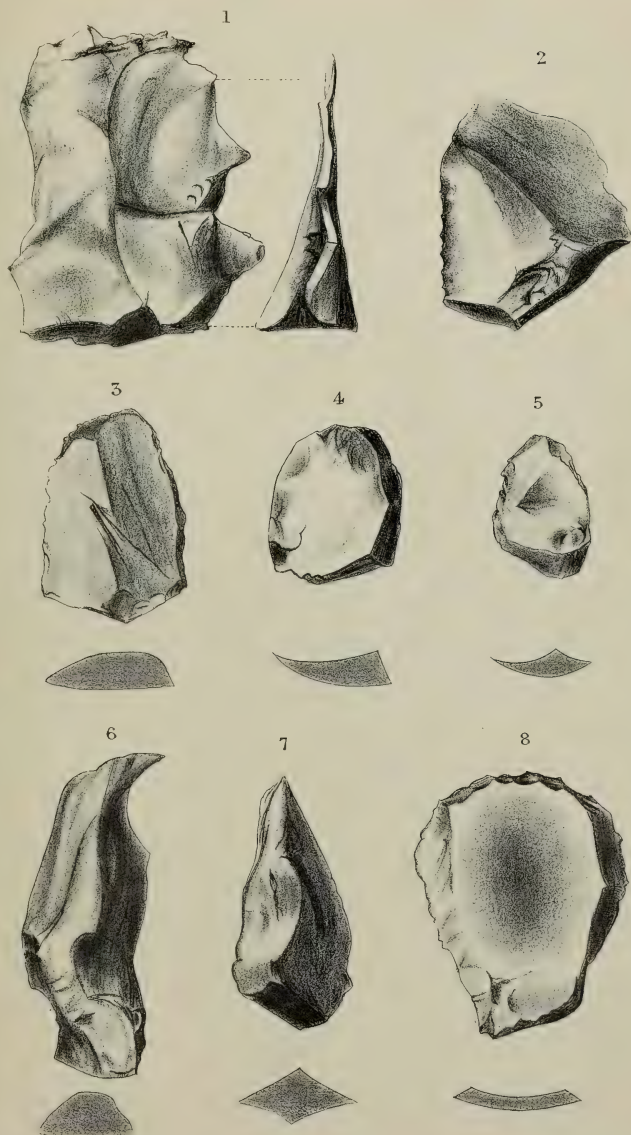


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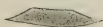




Robt Middlemas, Del.

Keith & Gibb, Aberdeen.





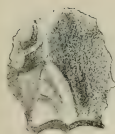
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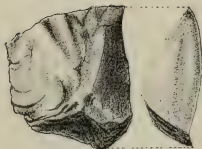
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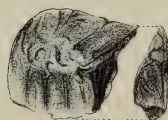
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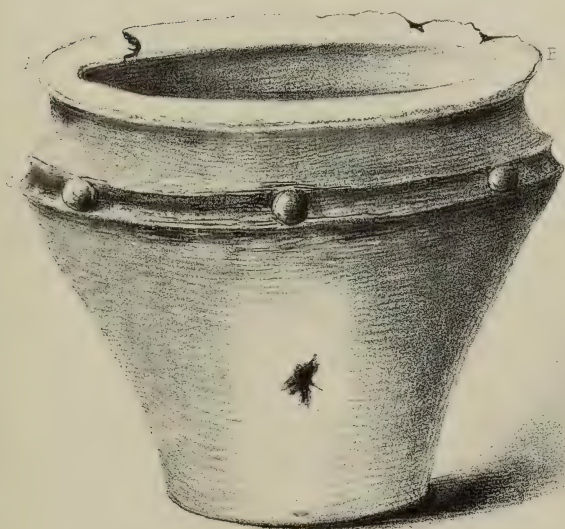






BRONZE CELT FOUND AT LINDEN.

from a Sketch by R.G. Bolam, Esq.



FOUND AT MILLBANK, AYTON

from a Sketch by R.M. Innes, Esq.

A to B 6½ in. C to C.T. height, 6 in.



